Operating Guide | Warranty

Model Numbers | R50V26 | R60V26 | **Projection TVs**

HIGH DEFINITION TELEVISION HDTV MONITOR

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zenith

RECORD YOUR MODEL NUMBER

The model and serial number of your Entertainment Machine™ are located on the back of the TV cabinet. For your future convenience, we suggest that you record these numbers here:

MODEL NO._____

SERIAL NO._____

WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

POWER CORD POLARIZATION:

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

COMPLIANCE:

The responsible party for this product's compliance is:
Zenith Electronics Corporation, 2000 Millbrook Drive, Lincolnshire, IL 60069, USA. Phone: 1-847-941-8000.

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IMPORTANT SAFETY INSTRUCTIONS

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this booklet can help you get many years of enjoyment and safe operation that are built into your new product.

This product complies with all applicable U.S. Federal safety requirements, and those of the Canadian Standards Association.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture

Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories, Carts, and Stands

Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

PORTABLE CART WARNING

9. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Power-Cord Polarization

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

(Continued on next page)

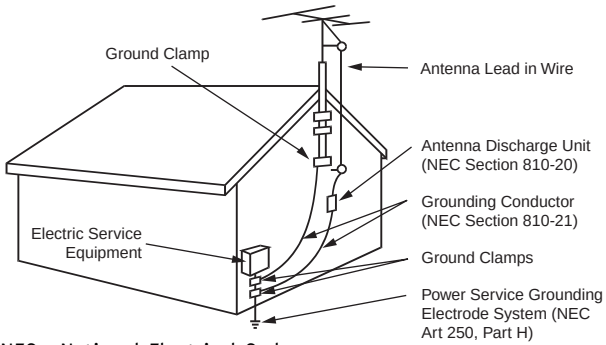
IMPORTANT SAFETY INSTRUCTIONS

(Continued from previous page)

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Example of Grounding According to National Electrical Code Instructions


Ground Clamp
Antenna Lead in Wire
Antenna Discharge Unit (NEC Section 810-20)
Grounding Conductor (NEC Section 810-21)
Electric Service Equipment
Ground Clamps
Power Service Grounding Electrode System (NEC Art 250, Part H)

NEC - National Electrical Code

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. If the power-supply cord or plug is damaged.

b. If liquid has been spilled, or objects have fallen into the product.

c. If the product has been exposed to rain or water.

d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

e. If the product has been dropped or the cabinet has been damaged.

f. If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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HIGH DEFINITION TELEVISION HDTV MONITOR

Read the information below, then turn to page 6 to hook up your Entertainment Machine

Step 1. Hook up external equipment and antenna or cable service wires to the TV, see pages 7 thru 16. Install batteries in the remote control. After all connections have been made, plug your TV into a standard household power outlet.
Step 2. Go to page 15 - 16 for Signal Source selection and Scan, channel search.
Step 3. Set up all other TV options see pages listed below.

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Features on your Entertainment Machine include:	Illuminated Programmable Remote Control MBR5045
540p / 1080i Display	EZ Focus (Automatic Color convergence)
7" Projection Tubes	Energy Star
2 NTSC Tuners	Trilingual On-Screen Menu System
Aspect Ratio Correction 4:3 and 16:9	Programmable Channel Labels
Front Surround (SRS), BBE	4-Mode On/Off Timer
SoundRite (Volume Limiter)	Mute/Soft Mute
POP-3 Picture-On-Picture Multi-Channel Display	Selectable Color Temperature
PIP Screen 2-Tunable Channel Images	Front/Rear Source Input Jacks

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Note: Design and specifications are subject to change without prior notice.

Hookup Directory

IMPORTANT!! Use this page to decide what connections you need to make and to begin your setup. First, find the lines below that best describes what you want to do, then go to those page numbers.

GENERAL HOOKUP INFORMATION

About your Jacks For an overview of the jacks on your Entertainment Machine, go to . . . . . page 7

INPUT HOOKUP OPTIONS

Antenna/Cable If you are using an antenna or have direct cable service, go to . . . . . page 8

Cable Box If you are using a cable box, go to . . . . . page 9

VCR If you are using a VCR, go to . . . . . page 10

VCR and Cable Box If you are using a VCR with a Cable Box, go to . . . . . page 11

DVD Player/HDSTB If you are using a DVD Player, S-VHS VCR, or High Definition Set Top Box, go to . . . . . page 12

External Stereo To hook up your Entertainment Machine to an external stereo, go to . . . . . page 13

Monitor Out For Monitor Out Hookups, go to . . . . . page 14

TIPS ON REAR PANEL CONNECTIONS

- S-VIDEO connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has S-Video.
- If your device has only one audio output (mono sound), connect it to the left audio jack on the television.
- Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.
- You may use VIDEO or S-VIDEO inputs to connect to Input 1, Input 2, or Input 5 but only one of these may be used at a time.
- Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input set of jacks.
- COMPONENT: Y-P_B P_R connections are provided for high performance components, such as DVD players. Use these connections in place of the standard video connection if your device has this feature. When using the Y-P_B P_R input jacks, Input 3 and 4 will be viewed as a split PIP Sub-Picture.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's P_B input and the components R-Y output to the TV's P_R input.
- Your component outputs may be labeled Y-C_B C_R. In this case, connect the components C_B output to the TV's P_B input and the components C_R output to the TV's P_R input.
- You may use standard video signal for INPUTS 1, 2, 3, 4, and 5.
- For component video, you may use INPUTS 3 and 4 only.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_B P_R inputs. (See Video menu.)
- To ensure against copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_B P_R jacks.

NOTES:

1. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's P B input and the components R-Y output to the TV's P R input.
2. Your component outputs may be labeled Y-C_B C_R. In this case, connect the component C_B output to the TV's P_B input and the component C_R output to the TV's P_R input.
3. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_B P_R inputs. (See Video menu.)
4. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, if using the Y-P_B P_R jacks.
5. When using the Y-P_B P_R jacks, TV will automatically change to SPLIT PIP mode. When you have Picture-on-Picture on and are viewing a Y-P_B P_R input, only SPLIT mode is possible.
6. Inputs 3 and 4 (Y-VIDEO) can be used for standard video input.

Source Connection Jacks Overview

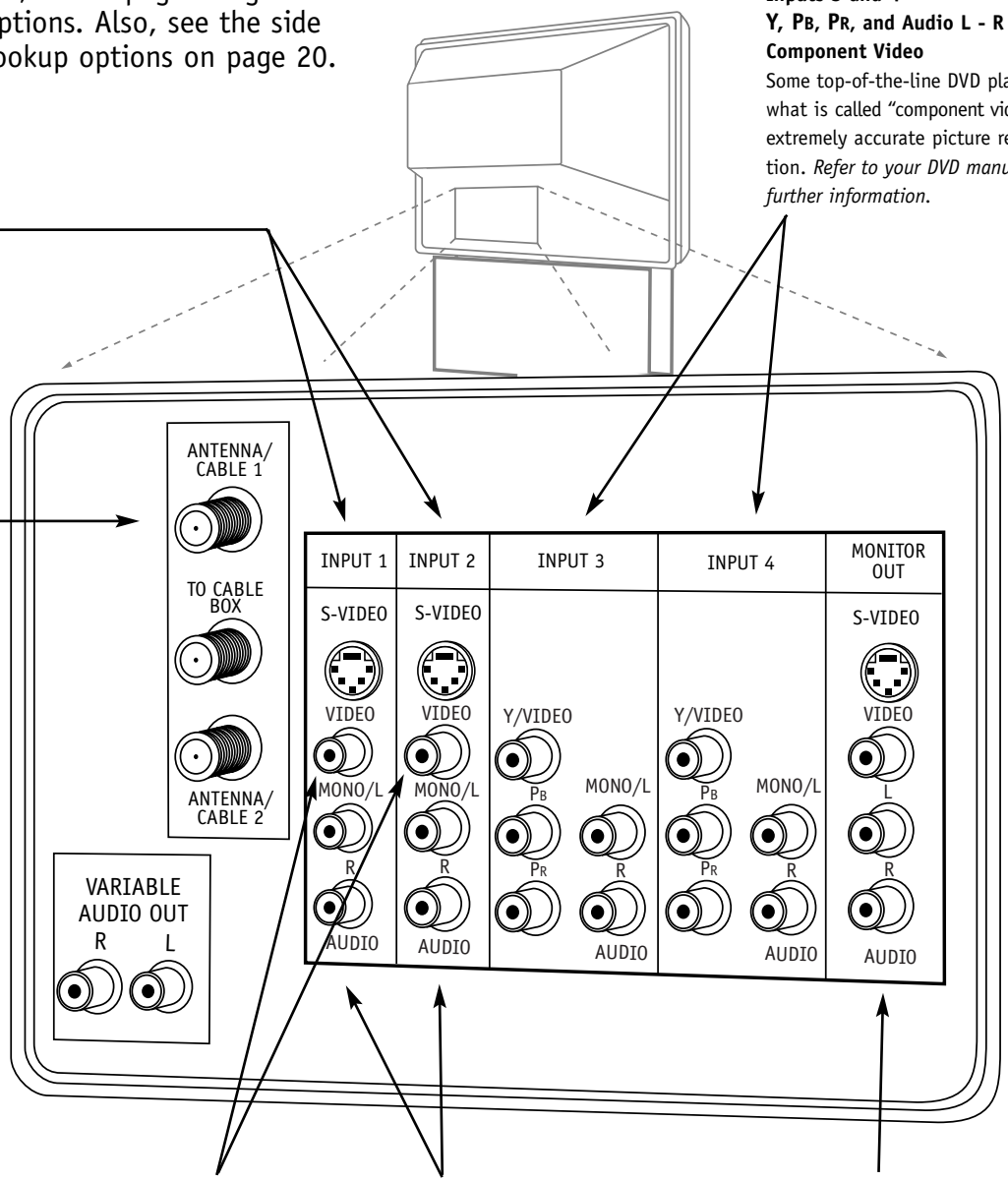
To hookup source equipment, refer to the Table of Contents on page 5; shows pages to go to for equipment hookup options. Also, see the side connections panel hookup options on page 20. See note below.

Inputs 3 and 4
Y, P_B, P_R, and Audio L - R
Component Video
Some top-of-the-line DVD players use what is called "component video," for extremely accurate picture reproduction. *Refer to your DVD manual for further information.*

S-Video Input 1 and 2
Connections available for some high-end equipment that provides even better picture quality.

RF Connectors: Antenna/Cable 1, Antenna/Cable 2, and Cable Box
Used to connect cable service to the television, either directly or through your cable box.

Variable Audio Out
Used to connect either an external amplifier or add a sub-woofer to your surround sound system.



Video 1 or 2
Connects the video signals from various types of equipment.

Right/Left Audio
Used for stereo sound from various types of equipment.

Monitor Out
These jacks provide fixed audio and video signals which are used for recording. Use S-Video Output for high-quality video output.

S-Video Output may be used for recording only when the type of input is S-Video.

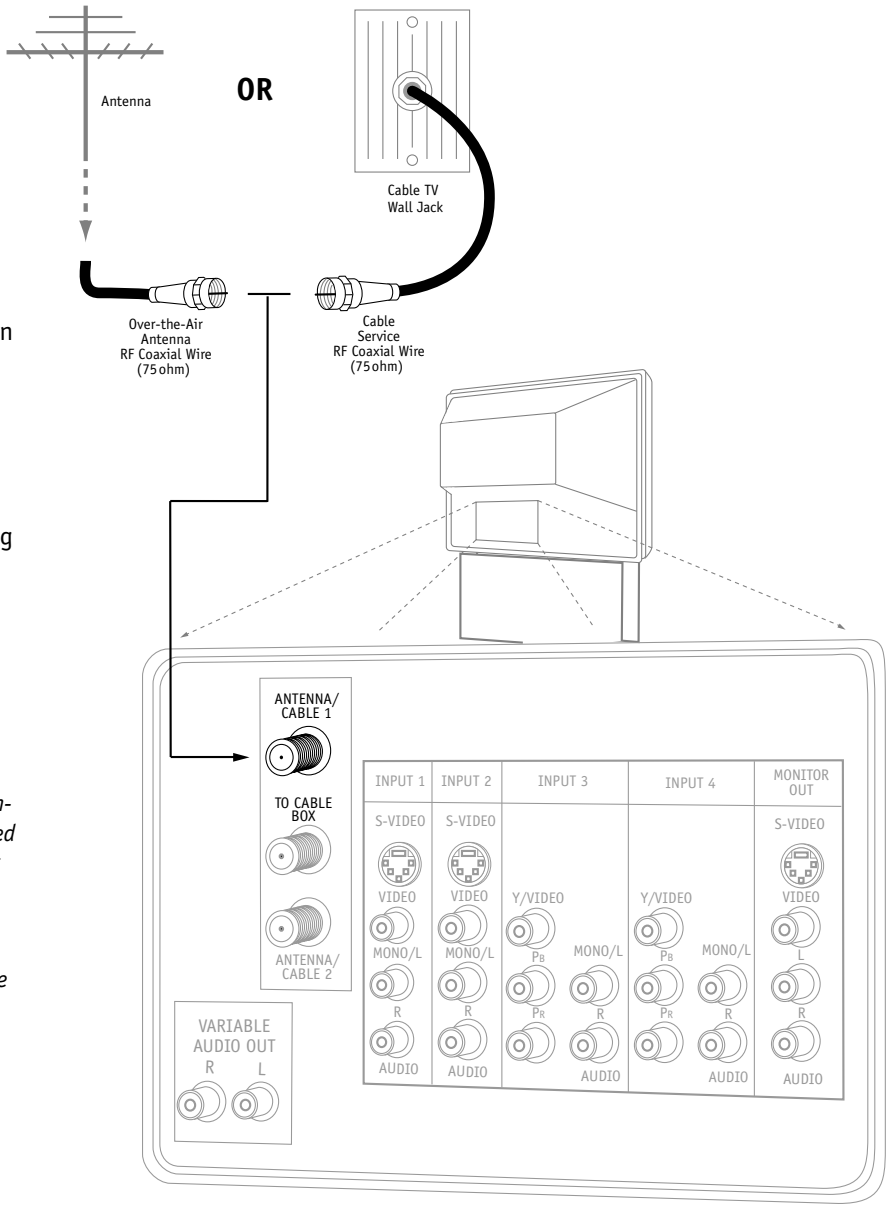
Inputs 1, 2, and 5 can be used for either Video or S-Video type source connections. However, both Video and S-Video sources cannot be connected to the same input at the same time.

Note: When you have finished hooking up your equipment, go to pages 15 - 16 to use Signal Source Selection and Scan to search for and find all the available channels in your area.

Note: Your Entertainment machine will appear to be turned off if there is no video input when VIDEO 1, 2, 3, 4, or 5 is selected. Check to see if the Power Light is lit to make sure the TV is turned off when not in use.

Hook Up Direct Cable TV or Antenna

Connect an off-air antenna



1 Locate the Antenna/Cable 1 jack on the back of your Entertainment Machine.

2 Connect the cable that runs from the wall directly to this jack.

3 Turn to page 15 to continue setting up your Entertainment Machine.

If you receive your RF signal through an antenna that is several years old and connects with two small prongs, you will need to purchase a 300 to 75 Ohm adapter. It should be available from your local electronics dealer.

Zenith recommends using a 75 Ohm cable for your antenna connections in order to prevent interference.

Mini glossary

75 OHM RF CABLE	The wire that comes from an off-air antenna or cable service provider. Each end looks like a hex shaped nut with a wire sticking through the middle, and it screws onto the threaded jack on the back of your TV.
300 TO 75 OHM ADAPTER	A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.

Hook Up Cable Box

Some cable services require the use of a cable box to decode premium channels and pay-per-view. Using the "To Cable Box" to Decoder option, and programming your remote, you can connect your cable box so that you only need your MBR remote to control all the channels. By connecting cable directly to your Entertainment Machine, then running it out to the cable box and back, you make the cable box another source to choose from in the Source selection on your remote.

1 Locate the Antenna/Cable 1 jack on the back of your TV. Connect the cable that runs from the wall directly to the jack. Now find the To Cable Box jack.

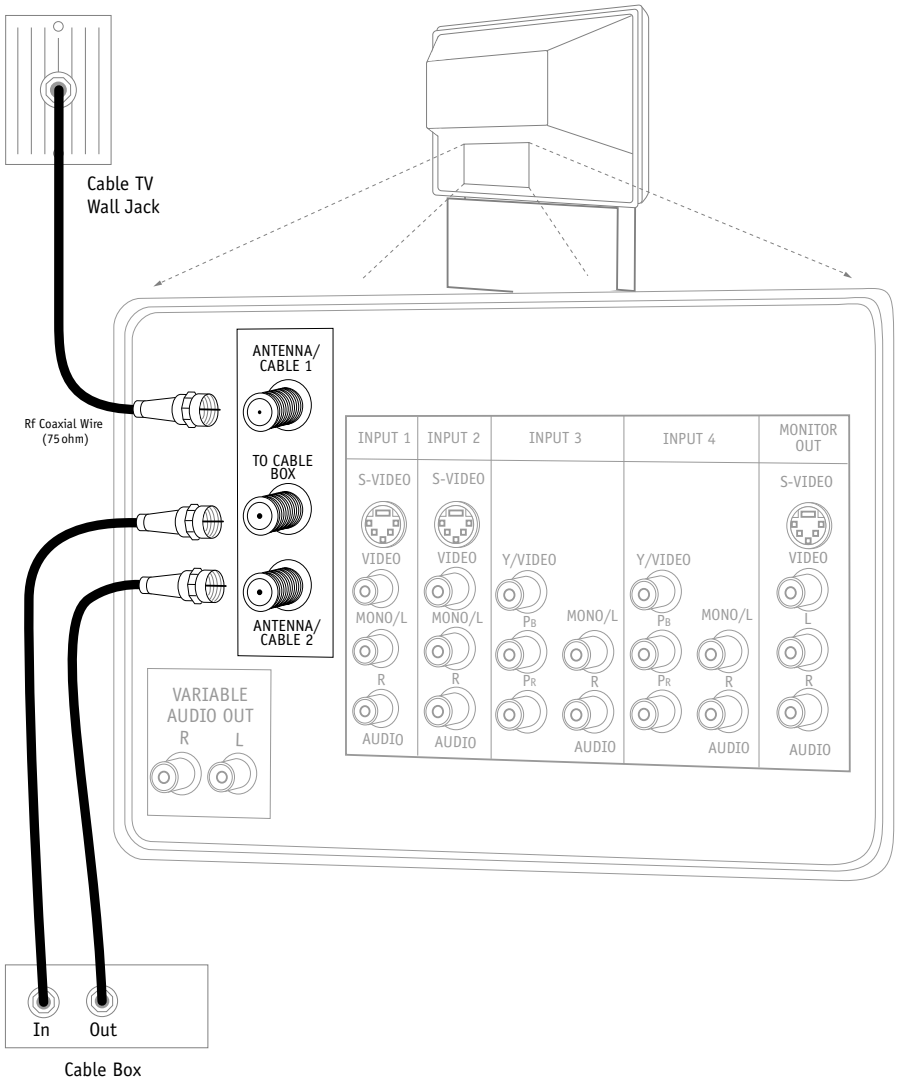
2 Connect the cable from this jack to the Input jack on the back of your cable box.

3 Locate the Output jack on the back of your cable box. Connect this to the Antenna/Cable 2 jack on the back of your TV.

4 To view the premium stations, set the channel number on your cable box to HBO, CINEMAX, SHOWTIME, etc. Then press the Source button on your remote and select the other Cable source (Ant 2).

To view the non-premium channels press the Source button and select Ant 1. Then run Scan to check for all available channels and store them in memory.

Turn to page 15 to continue setting up your Entertainment Machine.



To receive premium channels, run Auto Program on the second source that is set to receive channels.

Hook Up VCR

Connect your off-air antenna and VCR to your Entertainment Machine

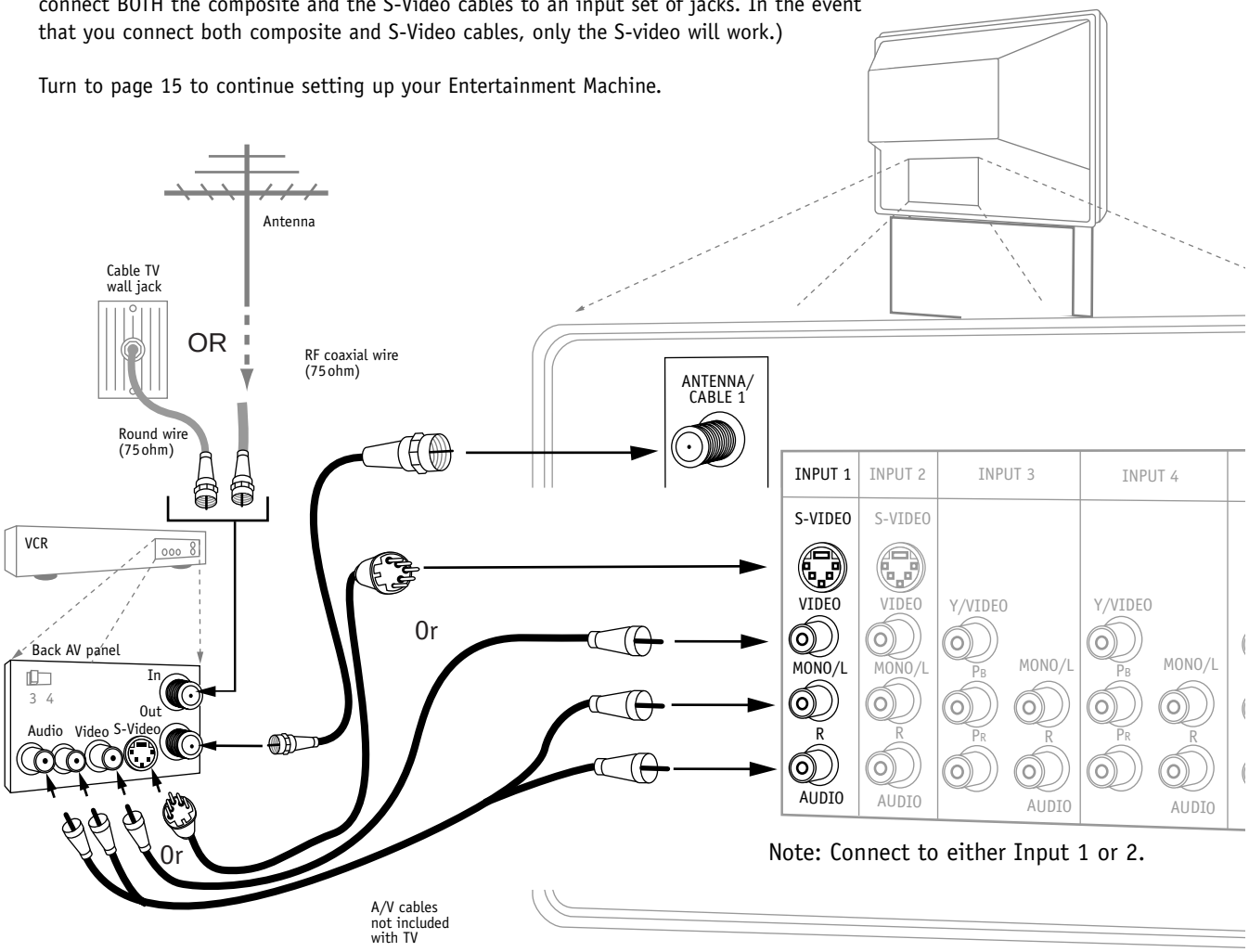
1 Locate the RF or VHF/UHF/CATV In jack on the back of your VCR. Connect the cable line coming from your wall directly to this jack.

2 Locate the Antenna/Cable 1 jack on the back of your Entertainment Machine. Connect the cable coming from the RF or VHF/UHF/CATV Out jack on the back of your VCR directly to this jack.

3 Find the composite video and audio jacks on the back of your VCR, and connect them following the instructions provided with your equipment.

4 You may connect either the composite video or the S-video cables to Inputs 1 or 2. (Do not connect BOTH the composite and the S-Video cables to an input set of jacks. In the event that you connect both composite and S-Video cables, only the S-video will work.)

Turn to page 15 to continue setting up your Entertainment Machine.



Note: Connect to either Input 1 or 2.

If you want to receive your signals on Channel 3 or 4, locate the Out to TV jack on your VCR. Connect a cable from the Out to TV jack to the Antenna/Cable 1 jack on the back of your Entertainment Machine.

For several pieces of equipment, edit the names under Source ID so you don't forget which is which. See page 31.

Hook Up Cable Box with VCR

1 Locate the RF or VHF/UHF/CATV In jack on the back of your VCR. Connect the cable line coming from your wall directly to this jack.

2 Locate the Antenna/Cable 1 jack on the back of your TV. Connect the cable that runs from the RF or VHF/UHF/CATV Out jack on the back of your VCR directly to this jack.

3 Now find the To Cable Box jack on your Entertainment Machine. Connect a cable from this jack to the Input jack on the back of your cable box.

4 Locate the Output jack on the back of your cable box. Connect this to the Antenna/Cable 2 jack on the back of your TV.

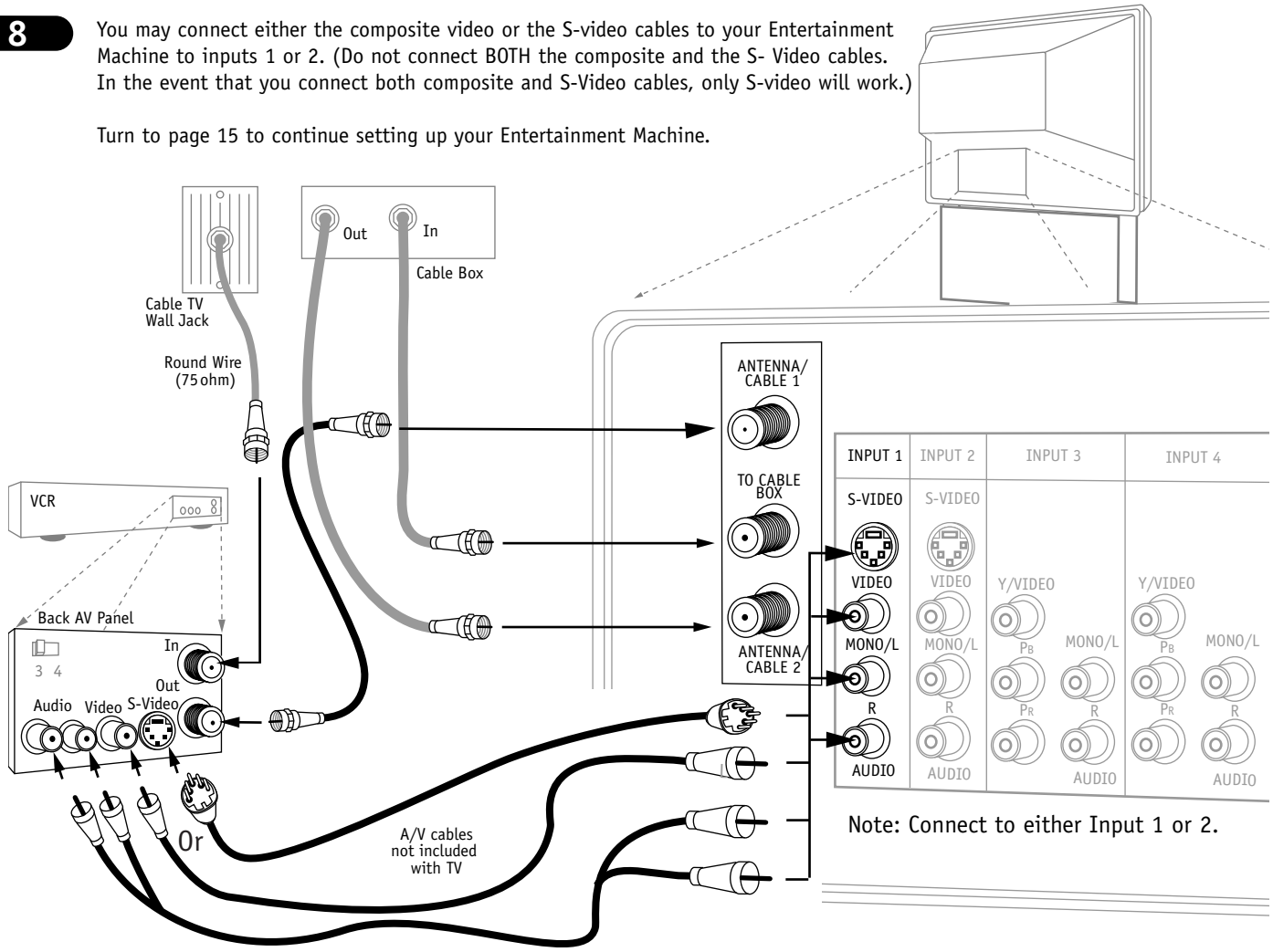
5 To view the premium stations, set the channel number on your cable box to HBO, CINEMAX, SHOWTIME, etc. Then press the Source button on your remote and select the other Cable source (Ant 2).

6 To view the non-premium channels, press the Source button and select Ant 1. Then run Scan to check for all available channels and store them in memory.

7 Find the composite video and audio jacks on the back of your VCR, and connect them as shown below to either Input 1 or 2, following the instructions provided with your equipment.

8 You may connect either the composite video or the S-video cables to your Entertainment Machine to inputs 1 or 2. (Do not connect BOTH the composite and the S- Video cables. In the event that you connect both composite and S-Video cables, only S-video will work.)

Turn to page 15 to continue setting up your Entertainment Machine.



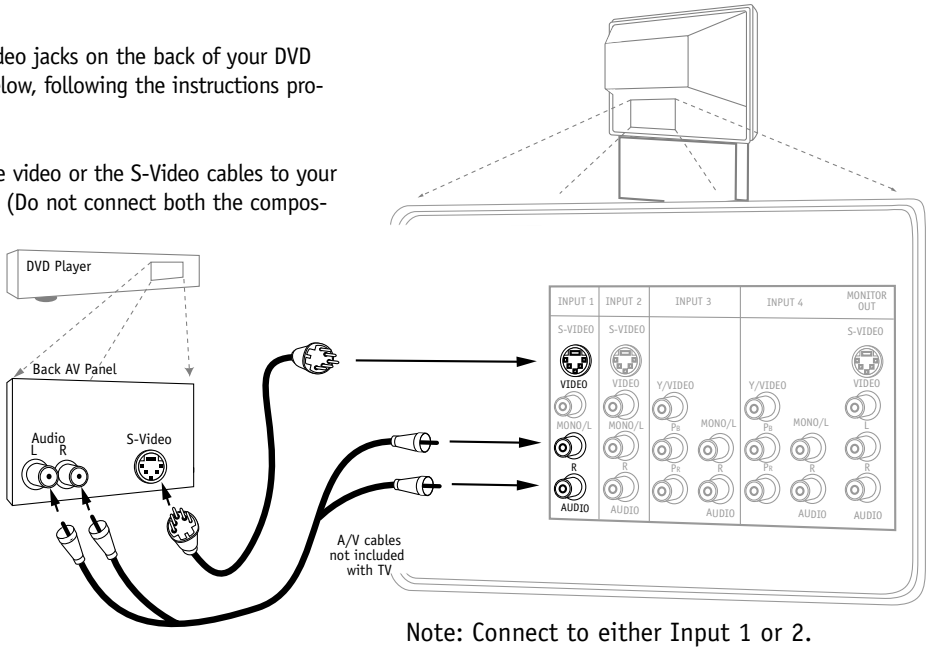
Note: Connect to either Input 1 or 2.

Hook Up DVD Player and HD Set Top Box

1 Find the audio and composite or S-Video jacks on the back of your DVD Player and connect them as shown below, following the instructions provided with your equipment.

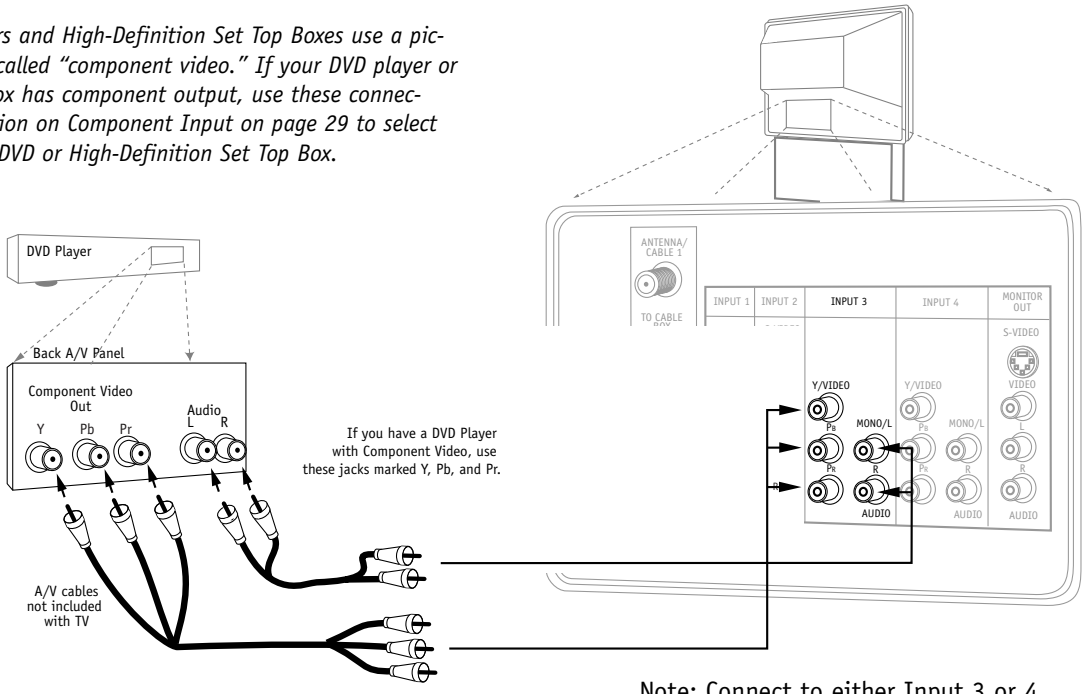
2 You may connect either the composite video or the S-Video cables to your Entertainment Machine Inputs 1 or 2. (Do not connect both the composite and the S-Video. In the event that you connect both composite and the S-video cable, only the S-Video will work.)

3 Use the SOURCE button on your remote to choose the DVD or Set Top box source.



Note: Connect to either Input 1 or 2.

Some high-end DVD players and High-Definition Set Top Boxes use a picture reproduction system called "component video." If your DVD player or High-Definition Set Top Box has component output, use these connections. Then go to the section on Component Input on page 29 to select the color system for your DVD or High-Definition Set Top Box.



Note: Connect to either Input 3 or 4.

For several pieces of equipment, edit the names under Source ID so you don't forget which is which. See page 31.

Hook Up External Stereo

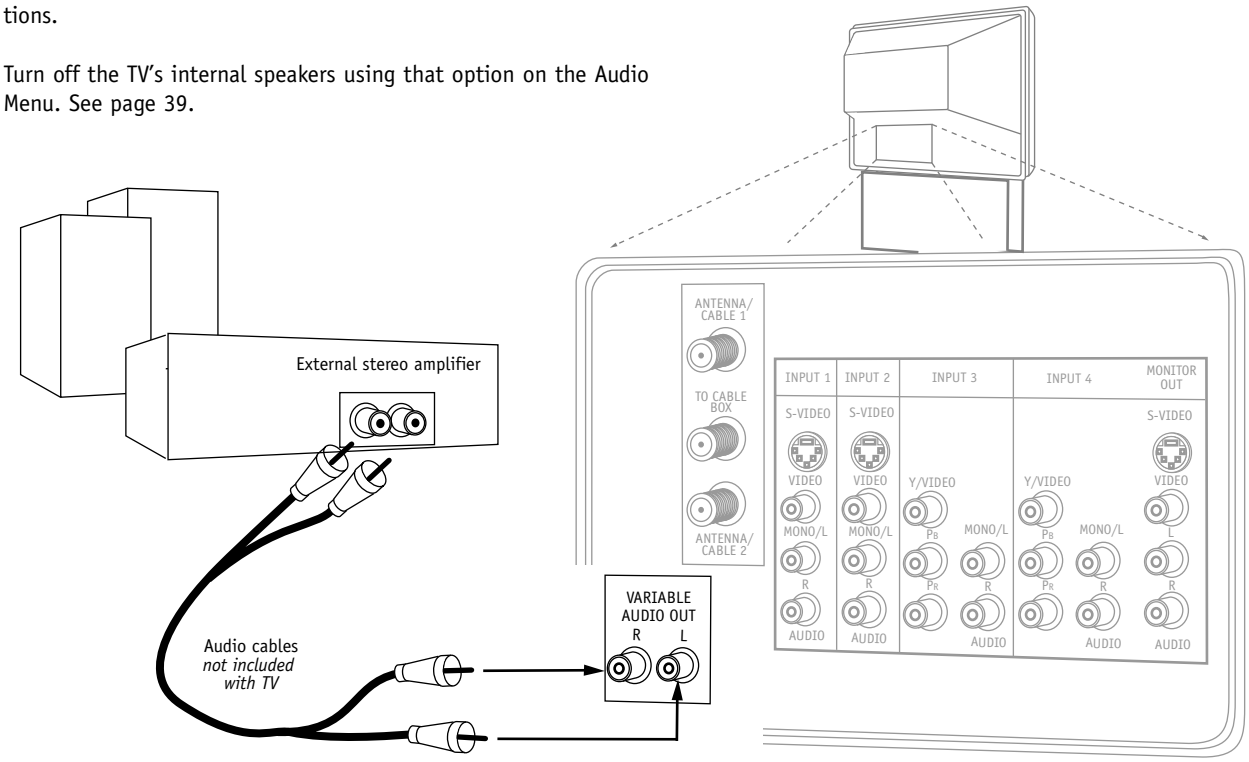
Send the sound from your Entertainment Machine to an external audio amplifier system; use it to hear the audio

1 Locate the Variable Out jacks on the back of your Entertainment Machine and the Input jacks on the back of your stereo's amplifier.

2 Use appropriate audio cables to connect these jacks, making sure that the right and left channels are matched correctly; right to right, left to left.

3 Set up your speakers through your stereo, according to those directions.

4 Turn off the TV's internal speakers using that option on the Audio Menu. See page 39.



To prevent damage to the speaker and avoid distorted sound, set the volume control of the audio amplifier to a quiet or low setting and adjust the sound on the TV, using the remote control or the front panel volume controls.

Hook Up Monitor Out

The Monitor Out jacks on your Entertainment Machine allow you to record to a second VCR!

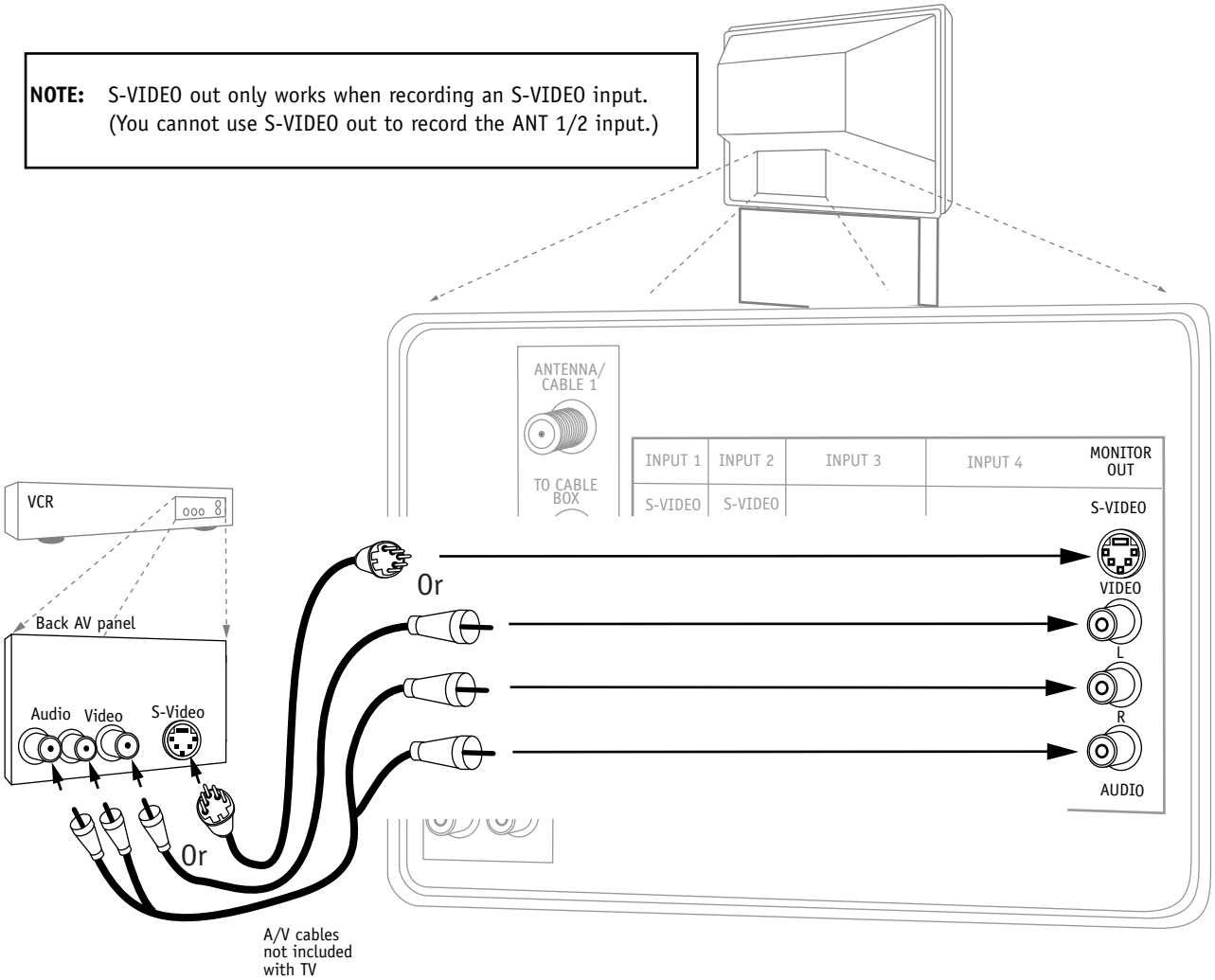
1 Locate the Monitor Out jacks on the back of your Entertainment Machine and the Input jacks on the back of your VCR.

Connect the Input jacks from your VCR to the Monitor Out jacks on the back of your Entertainment Machine as shown in the diagram.

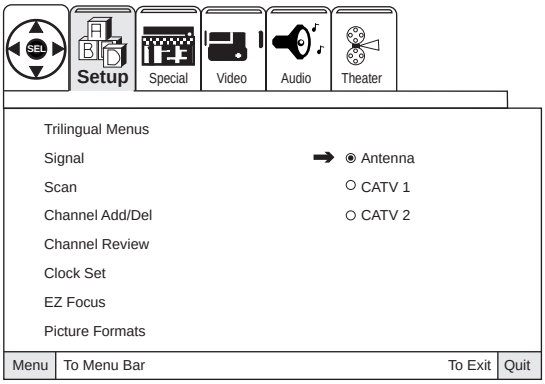
You may connect either the composite video or the S-video cables to your Entertainment Machine. (Do not connect BOTH the composite and the S- Video cables. In the event that you connect both composite and the S-Video cables, only the S-video will work.)

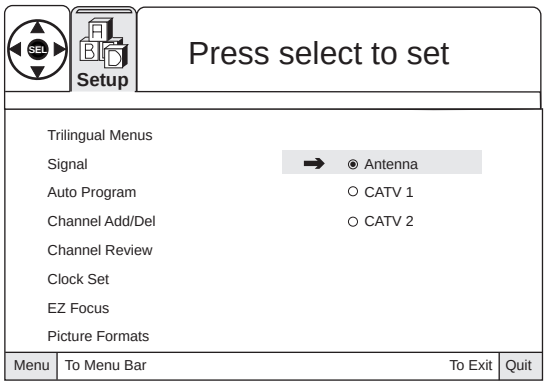
2 Program your VCR to record from the Video (or S-Video) input. See your VCR operating manual for details.

NOTE: S-VIDEO out only works when recording an S-VIDEO input. (You cannot use S-VIDEO out to record the ANT 1/2 input.)

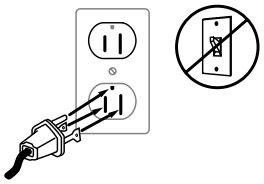


Signal Source Selection

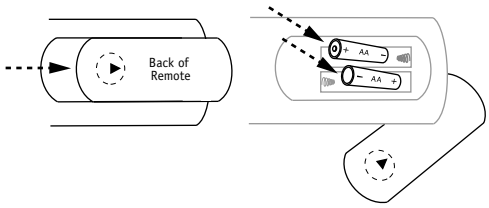


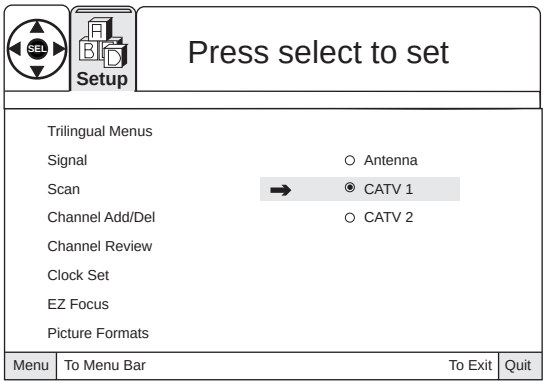


1 Use pages 7-14 to hook up your Entertainment Machine. Plug your Entertainment Machine into a standard 120V 60Hz power outlet.



2 Remove the back of the remote and put in two "AA" batteries. Make sure batteries are properly installed (check the +/– signs).





3 Turn on your Entertainment Machine by pressing the POWER button on your remote.

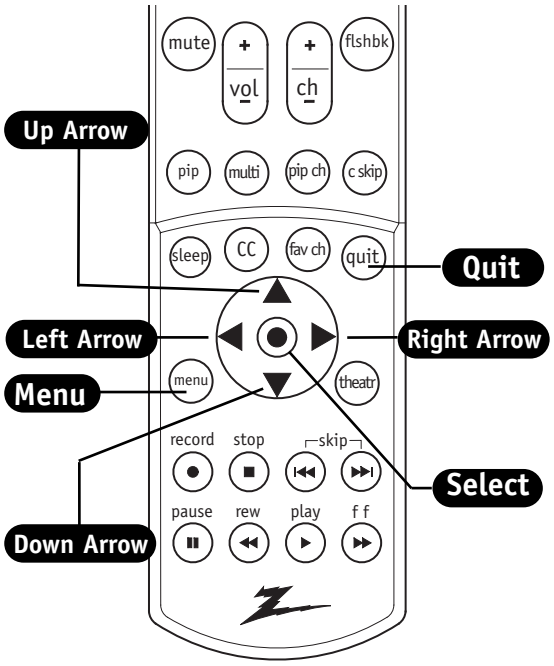
4 Press the MENU button on your remote.

5 Choose Signal using the DOWN arrow button.

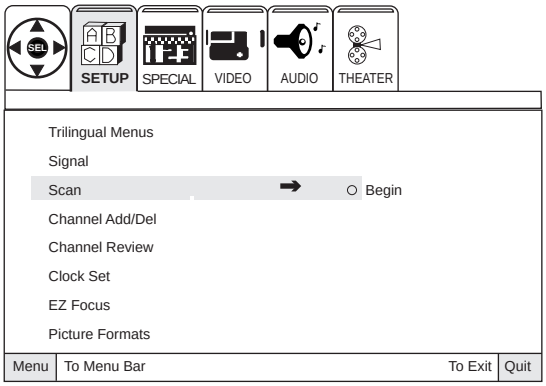
6 Activate the Signal Menu option by pressing the RIGHT arrow button on your remote.

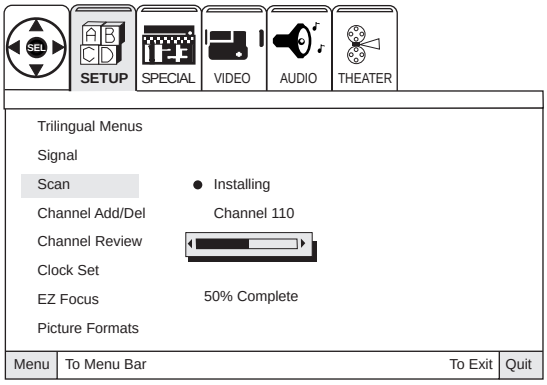
7 Choose the signal source for your Entertainment Machine. If your signal comes from an outdoor antenna, leave set at ANTENNA. If your signal comes from a cable TV service, select CATV 1 by pressing the DOWN arrow button. Press "select" to set (confirm) your choice, then press the MENU button to return to the Setup Menu.

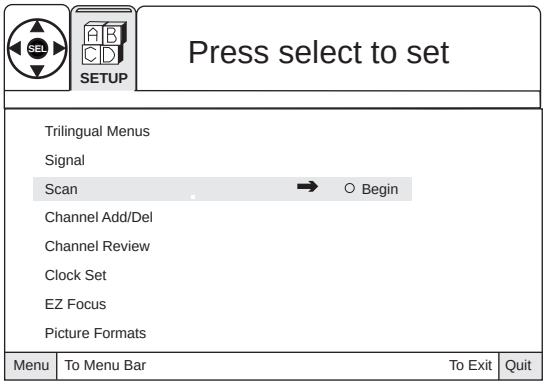
8 Continue to the next page to scan for available channels.



Scan (Channel Search)







Continued from previous page.

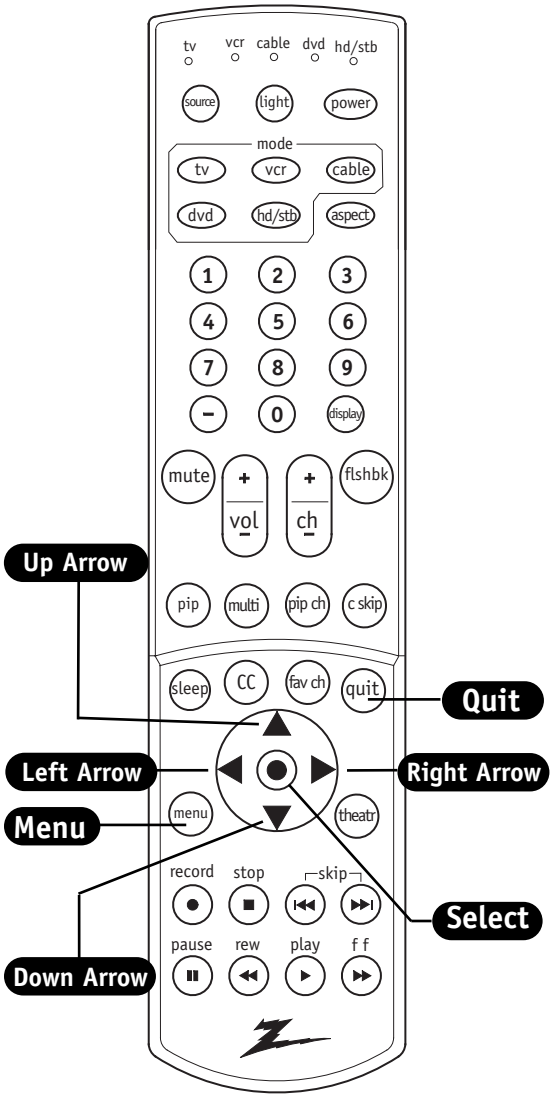
1 Press the MENU button on your remote to display the Setup Menu. (If the Menu is already on-screen, skip this step.)

2 Choose Scan mode using the DOWN arrow button on your remote.

3 Press the RIGHT arrow button to choose Scan.

4 Press the SELECT button on your remote to begin Scan (the channel search).

If certain CATV channels are not received clearly in CATV1 mode, set signal to CATV2 mode.



TV Mode Remote Key Functions

SOURCE
Selects available TV sources.

Remote Operating Mode Indicator Lights
Light indicates the active mode when a key is pressed.

Mode selection keys: TV, VCR, CABLE, DVD, HD/STB
Switches remote operating mode to control other devices.
Note: After pressing a Mode switch key, wait 2 - 3 seconds before pressing any other key.

NUMBER KEYPAD 0 - 9
Selects channels directly and enters numerical values.
- (Digital Mode Dash)
Use as the dash when selecting digital channel numbers.

MUTE
Press once for Soft Mute, press again for full Mute.

VOL - (VOLUME) (+/-)
+ Increases the sound level.
- Decreases the sound level.

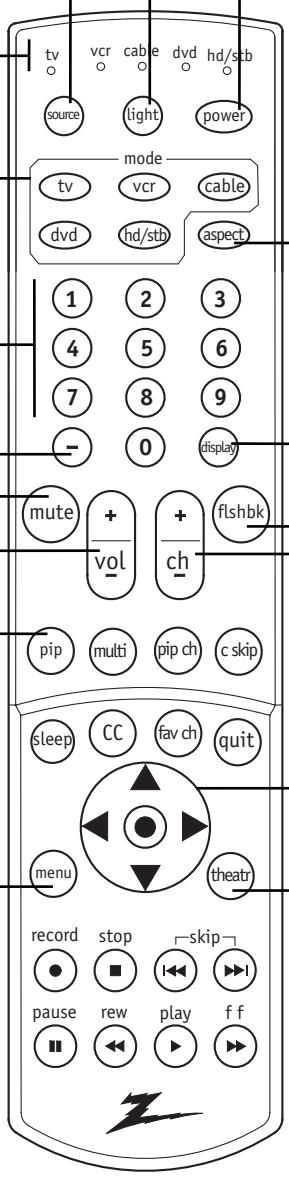
PIP
Turns PIP on and off.

SLEEP (TIMER)
Sets a preset time for the TV to turn itself off.

CC
Turns On/Off Closed caption/text options.

MENU
Displays on-screen menus.

VCR Function Keys
RECORD, STOP, PAUSE, REW (Rewind), PLAY, FF (Fast Forward) Still operate your VCR, while remote is in TV operating mode.



remote control part number
MBR5045
924-10114

LIGHT
Lights keys for five seconds.

POWER
Turns TV On and Off.

ASPECT
Selects different picture proportion formats.

DISPLAY
Shows current on-screen settings.

FLSHBK (FLASHBACK)
Returns to the previously tuned channel.

CH - CHANNEL (+/ -)
Tunes to next higher/lower available channel.

MULTI
Turns "POP-3" feature on and off.

PIP CH
Channel tuning switch in Split Screen mode. See Split Screen section.

C SKIP
Channel Skip. Tunes to last channel viewed. Tunes back to original channel after 30, 60, 90, 120, 150, or 180 seconds.

FAVORITE CHANNEL
Select among 6 different channel classifications.

QUIT
Leaves programming menus and clears screen of displays.

UP/DOWN/LEFT/RIGHT/SELECT (Menu Operation Directional Arrows and Select key)
Up/Down arrows ***choose,*** and Left/Right arrows ***adjust*** menu options. Press the bulls eye ***Select*** button in the center of the directional arrows to confirm selection.

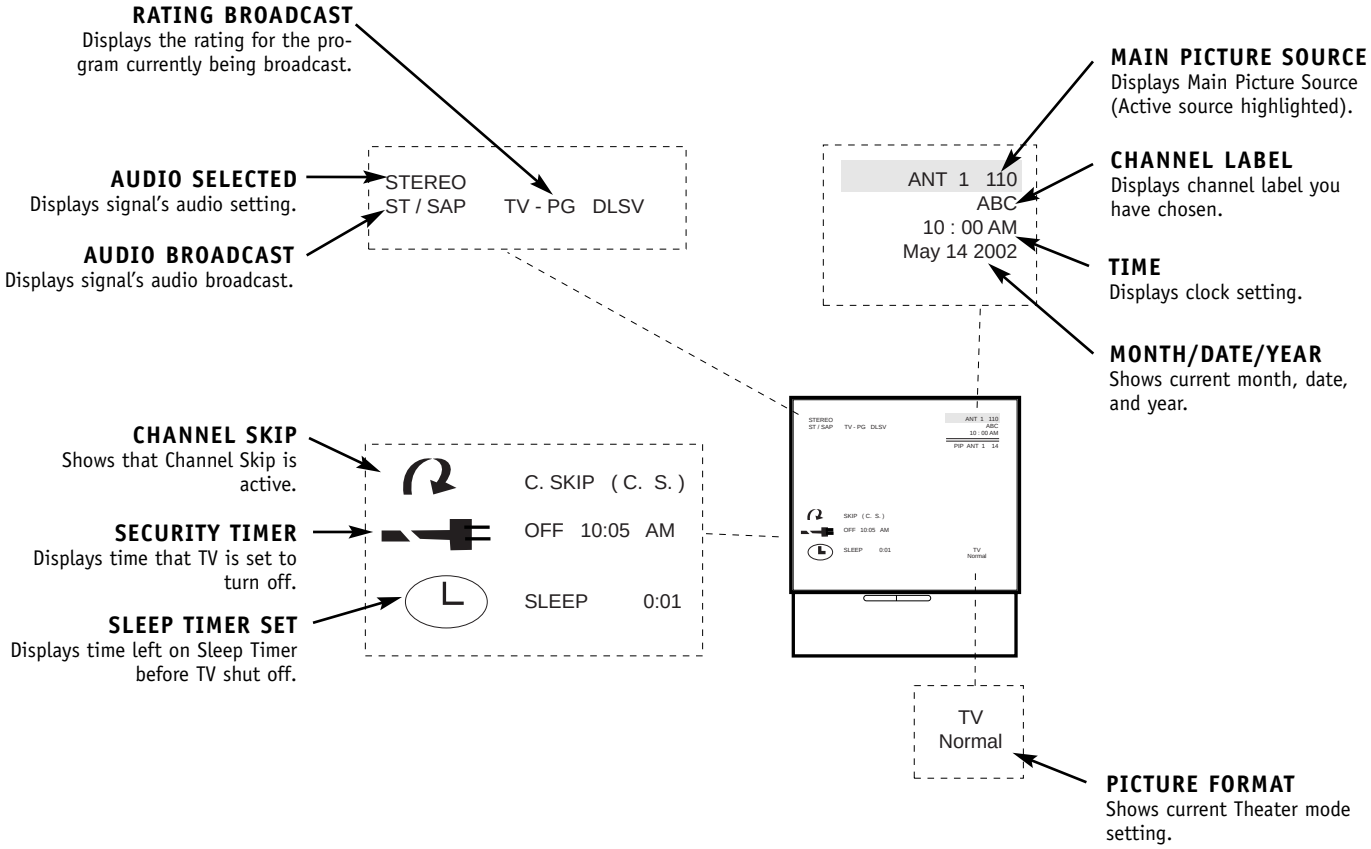
THEATER
Direct access to theater modes.

SKIP I<<
Left chapter scan for DVD.

SKIP >>I
Right chapter scan for DVD.

*Note: Digital broadcasters can transmit multiple programs on a single channel. These programs are distinguished by a unique "sub-channel" number, separated when entering digits by the "—" button on your remote.

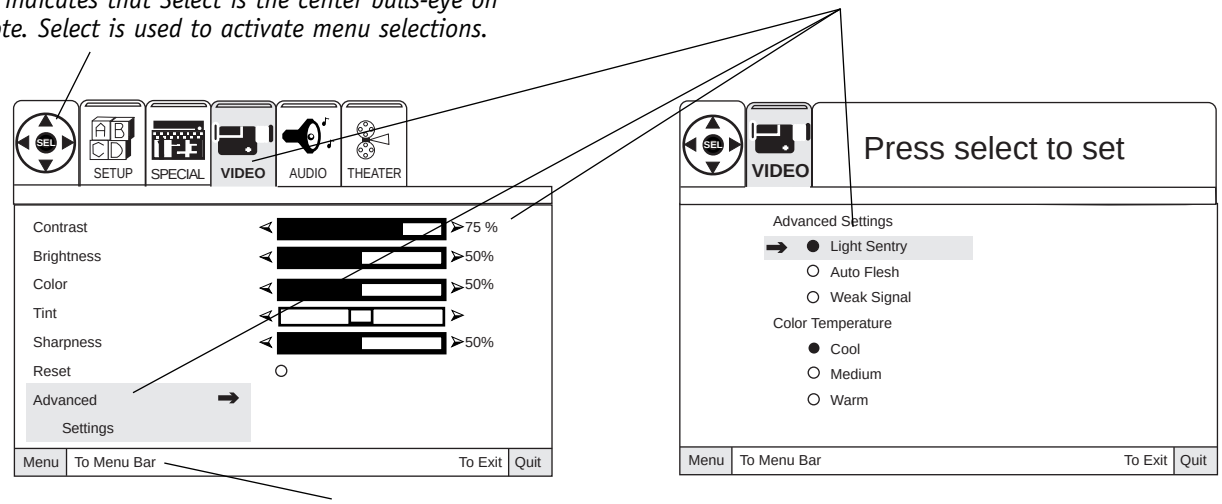
This page explains your on-screen display, press DISPLAY on remote to show on screen



On-Screen Menu Operation

When chosen, menu title (shown here in gray for clarity) and highlighted menu option fields change to a gold color

"Sel" indicates that Select is the center bulls-eye on remote. Select is used to activate menu selections.



"To Menu Bar" indicates that if you press MENU, TV returns to main menu selection options

Use the remote to access the on-screen menus

1 Press MENU on the remote control. Use the Right or Left directional arrow to highlight *(change the text color to gold)* the name of one of the five main menus on your screen like the SETUP menu.

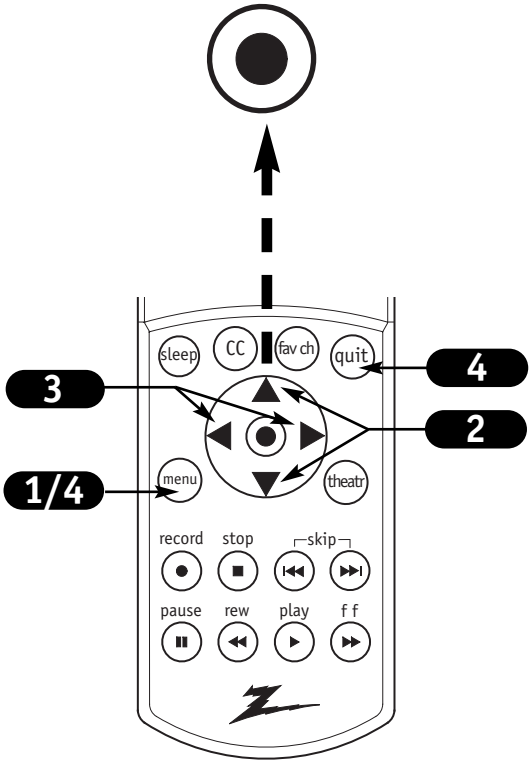
2 Use the Up or Down directional arrow to highlight an option like Contrast. You can highlight other menu options like Color Temperature by pressing the UP or DOWN directional arrow repeatedly.

3 Once the option is selected, in this case CONTRAST, use the RIGHT or LEFT directional arrow to adjust the setting; the larger the number the more contrast, the lower the number, the less contrast in the picture.

4 You can adjust the other menu options using the above procedure or if you are done changing the menu option settings, press QUIT to remove the menus from the TV screen.

Additional instructions are usually included on the top and bottom of the menu indicating which remote keys to use to move to the right, move to the left, return to the original menu, and to exit the menu etc.

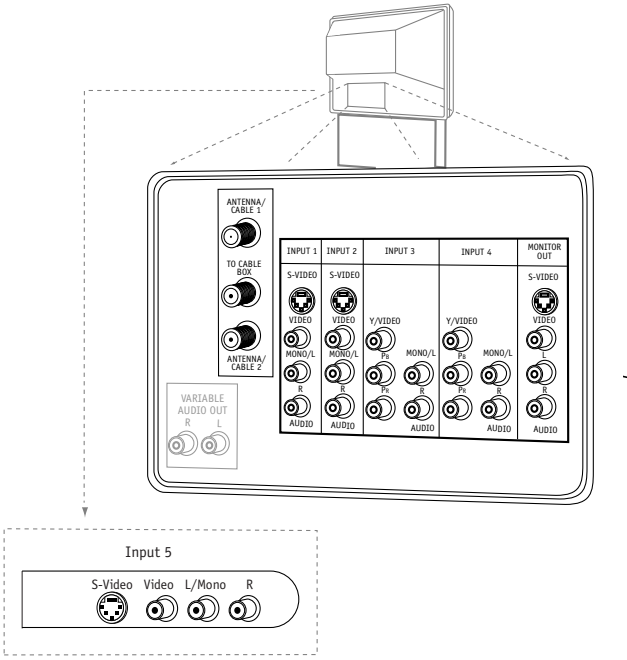
Press the thumbstick center bulls-eye "SELECT" (Shown as SEL on the upper-left side of menus) when required to set your selection.

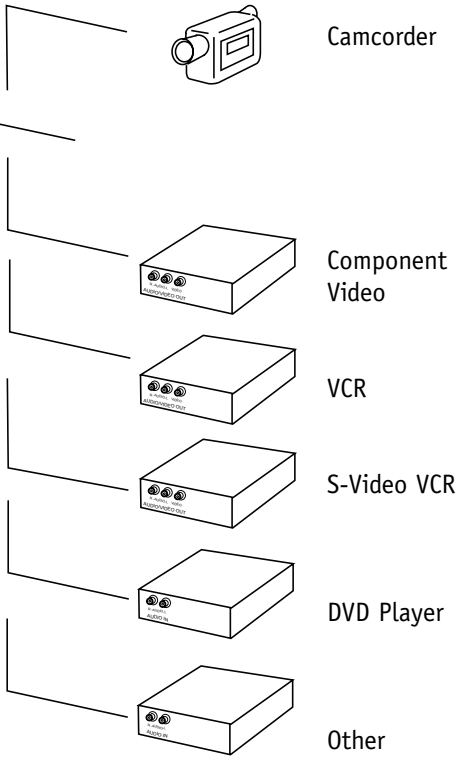


Mini glossary

MENU	On-screen displays used to set up and operate TV features.
SEL (Select)	Selection key used to confirm changes on the menus.
UP/DOWN	Menu UP or DOWN directional arrows used to highlight menu options.
LEFT/RIGHT	Menu LEFT or RIGHT directional arrows used to "adjust" some menu settings.
QUIT	Exits menus and removes on-screen displays.

Choose the picture and sound source you want to see and hear





Typical Viewing Sources

1 On the remote, press SOURCE repeatedly to choose from the available viewing sources connected to the TV.

Antenna 1 - 2: Antenna/Cable inputs on TV back near Jackpack, Over-the-Air Antenna or Cable service signal source.

Input 1: on TV Rear Jackpack,
Set of Composite Audio/Video Input jacks.

Input 2: on TV Rear Jackpack,
Set of Composite Audio/Video Input jacks.

Input 3: on TV Rear Jackpack,
Set of Component/Composite Audio/Video Input jacks.

Input 4: on TV Rear Jackpack,
Set of Component/Composite Audio/Video Input jacks.

Input 5: on TV Front Jackpack,
Set of Composite Audio/Video Input jacks.

The source equipment you intend to view should be turned on.

Inputs 3 and 4 (Y-VIDEO) can also be used for standard video input.

Connection Notes

- Be sure to insert connection cord plugs securely when connecting to front panel jacks, or the played back image may be abnormal.
- For S-Video, use the S-Video cable in place of the standard video cable.
- S-Video Monitor Out only works when an S-Video device is connected to either Inputs 1, 2, or 5.
- For monaural VCR sound output, insert the VCR audio out cable into the Left audio in jack on the TV.

Front Control Panel/Connection Jacks

Use the front control panel to operate the TV's basic features and the front Audio/Video source input panel jacks to make temporary connections

1 To access the menus, press the MENU button on the panel. Also use MENU as the Select key when required.

2 Use the VOLUME Left/Right buttons as the LEFT/RIGHT arrow buttons on your remote.

3 Use the CHANNEL Up/Down buttons as the UP/DOWN arrow buttons on your remote.

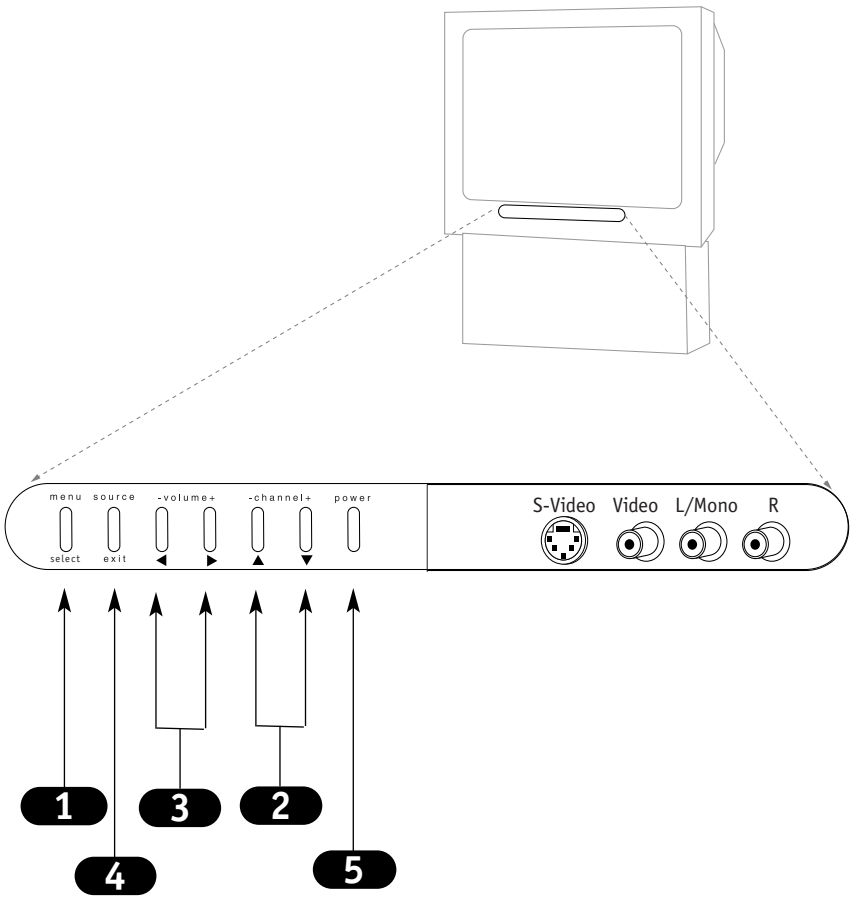
4 Push the QUIT button to return to normal TV viewing.

5 Press the SOURCE button to cycle through all sources.

Refer to the menu pages for using the on-screen menus.

The CHANNEL and VOLUME buttons work just as they do on your remote control.

Auto Demo is activated by pressing the POWER button on the front panel and holding down on the button. To turn Auto Demo off, press the POWER button once.



There are four jacks on the front panel of your Entertainment Machine that make connecting Audio/Video equipment like video games and camcorders very simple.

The jacks are identical to those found on the back of your Entertainment Machine. This means that any equipment that connects to those types of jacks on the rear jack connections panel, can also be connected to the front panel.

To select the front jacks as the signal source, use the SOURCE button on your remote. To change the name of the front video source, Input 5, see page 31.

Descriptions of the on-screen menus

Using MENU, the Up/Down/Left/Right arrows, and the thumbstick bulls eye (Select), the user can access the following menus.

SETUP MENU Adjust the basic characteristics of your Entertainment Machine.

Trilingual Menus	24	Pick the language (English, French, Spanish) that you want the on-screen menus to appear in.
Signal	15	Specify the type of incoming Signal Source (Antenna or Cable) for the Antenna/Cable 1 jack.
Scan	16	Automatically find and store active channels to tune to using Channel Up/Down.
Channel Add/Del	25	Manually pick and choose which active channels will appear when using Channel Up/Down.
Channel Review	26	Review the labels and Parental Controls you have placed on your channels.
Clock Set	27	Set the Clock on your Entertainment Machine.
EZ Focus	28	Use to have the TV automatically adjust the color convergence.
Picture Formats	29	Choose the picture aspect style for your DVD player or High Definition Set-top Box source.

SPECIAL MENU Go beyond basics and customize your Entertainment Machine's features.

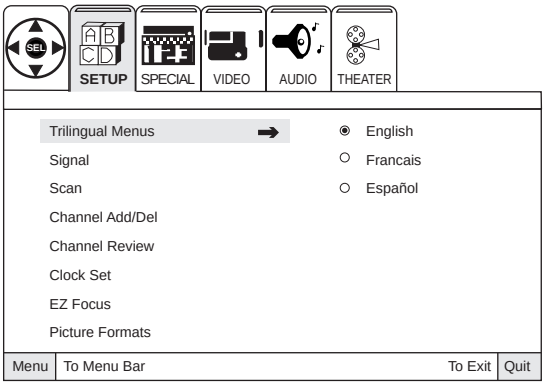
Channel Labels	30	Label your channels with their network names (ABC, CBS, HBO, etc.).
Source ID	31	Customize the names of your sources by either selecting a preset label or making your own.
Favorite Channels	32	Choose your Favorite Channels according to their category: Movies, Sports, News, Sitcoms, Music, or Custom.
Parental Control	33	Allows parents to block program content with the use of a password.
Security Timer	35	Program up to four separate times for your Entertainment Machine to turn itself on or off, or to turn itself off after a certain amount of time.
Captions	36	Choose a captioning or text option for your TV.
Background	37	Change the background of the on-screen menus to solid or shaded.

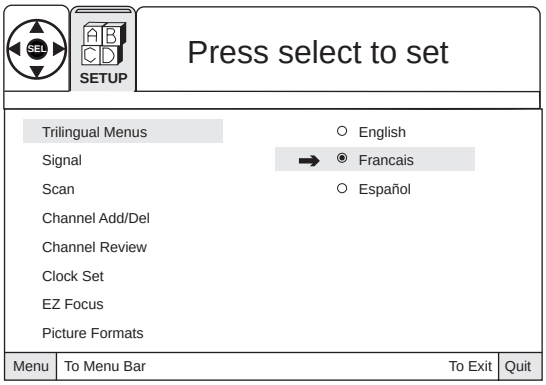
Menu Name	Page	Menu Description
VIDEO MENU	38	Adjust your picture for any viewing situation. Your options are: Contrast, Brightness, Color, Tint, Sharpness, Reset and Advanced Settings: Light Sentry, Auto Flesh, Weak Signal, Color Temperature: Cool, Medium, Warm.
AUDIO MENU	39	Customize the sound to suit your room and your taste. Your options are: Bass, Treble, Balance, Reset and Advanced Settings: Stereo, Mono, Second Audio Program, Internal Speakers, Auto Noise Cancel, Loudness, and SoundRite.
THEATER MENU	40	Select the right audio and video automatic configuration setup that optimize your TV's performance for TV, Movies, Music, Sports, or Reset. Select Surround sound options.

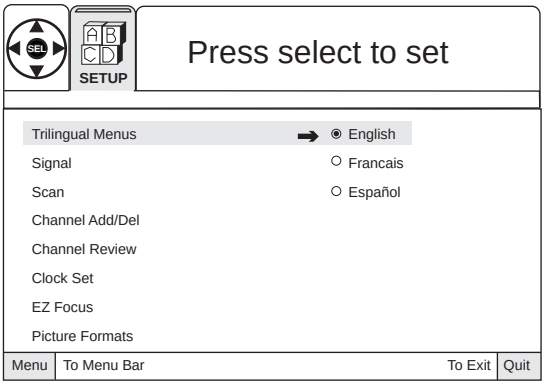
Displays

POP-3	41	Show a continuous 3-channel presentation in numerical series on your Entertainment Machine.
PIP SCREEN	43	Display Picture-in-Picture to show two different channels at the same time on your Entertainment Machine.

Trilingual Menus







Choose the language you want the on-screen menus to appear in; English, French, or Spanish

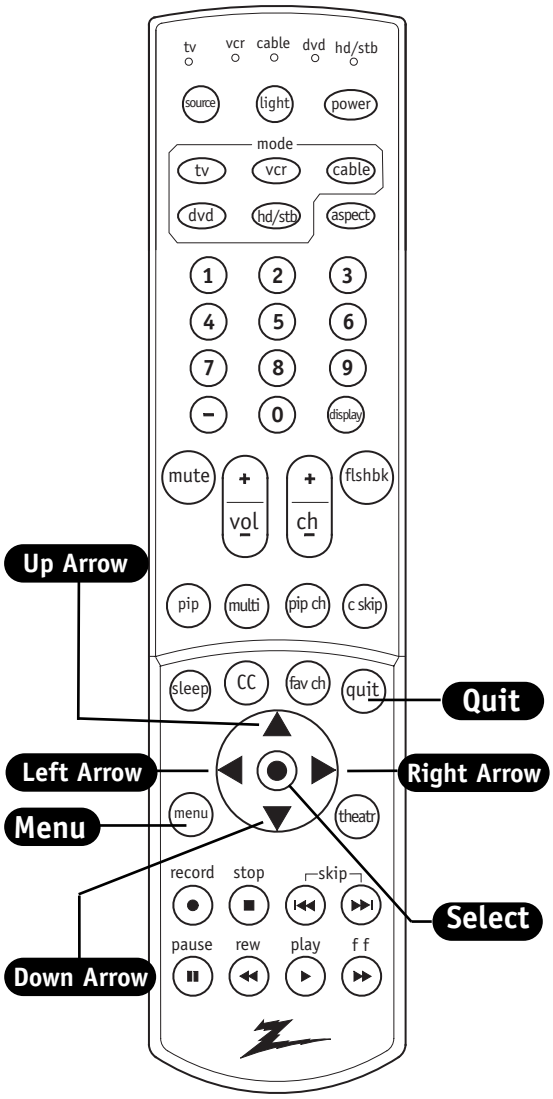
1 Press MENU to access the Setup menu.

2 Use the DOWN arrow to choose Trilingual.

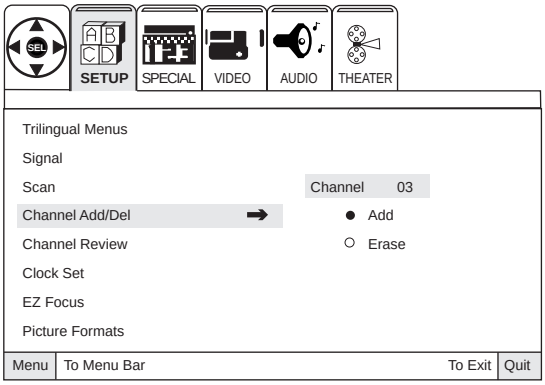
3 Press the RIGHT arrow button to activate the Language menu option.

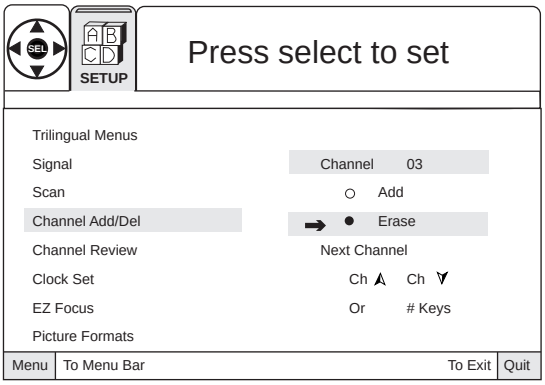
4 Use the UP/DOWN arrow button to choose your language preference for the on-screen menus, press Select to set and confirm your choice.

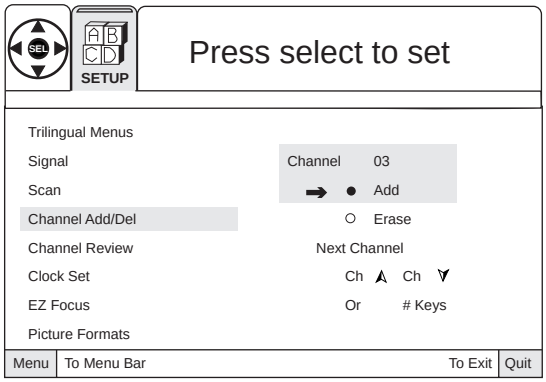
5 Press QUIT to exit and save your choice.



Channel Add/Del (Delete)







Customize your channel selection list: Add Channels not found by Scan (Channel Search), Delete channels you don't watch. Channels will appear when using Channel Up/Down

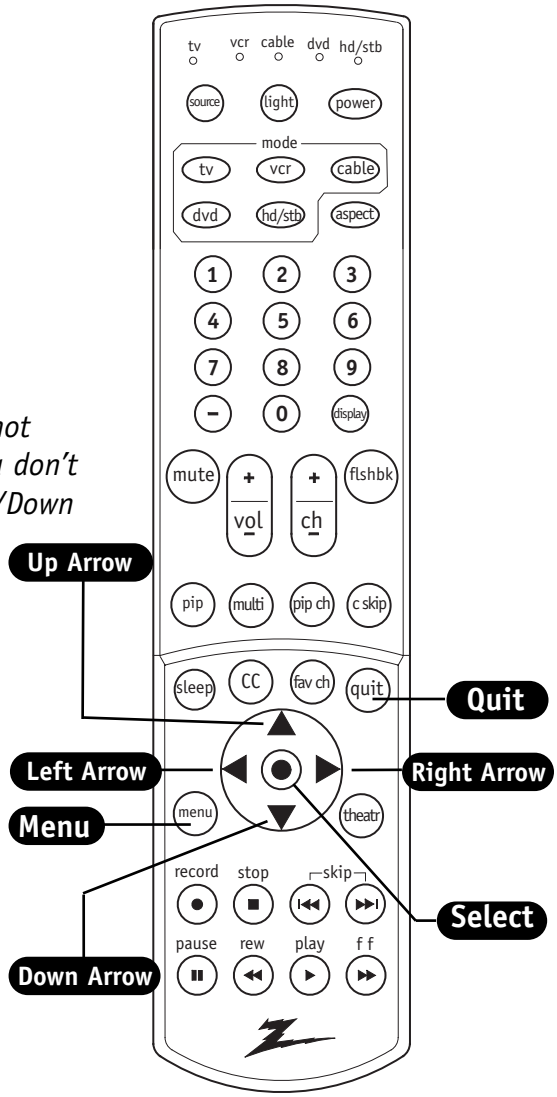
1 Press the MENU button on your remote to access the Setup menu.

2 Use the UP/DOWN arrow to choose Channel Add/Del.

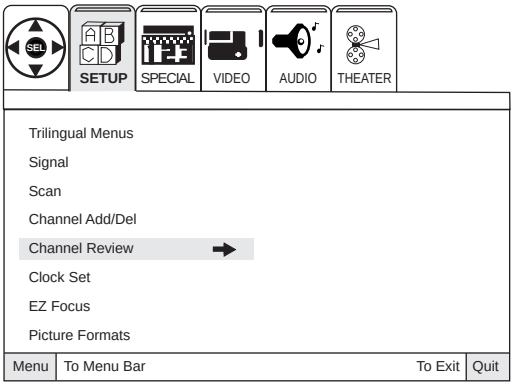
3 Press the RIGHT arrow button to activate the Channel Add/Del menu option.

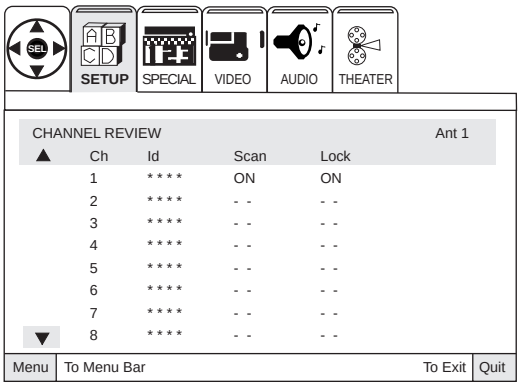
4 Use the UP/DOWN arrow button to choose the Add or Delete option for the currently chosen channel, press Select to set and confirm your choice.

5 Press QUIT to exit and save your choice or use the Channel UP/DOWN buttons/numbers to choose another channel to Add or Erase.



Channel Review





Review channel settings on your Entertainment Machine

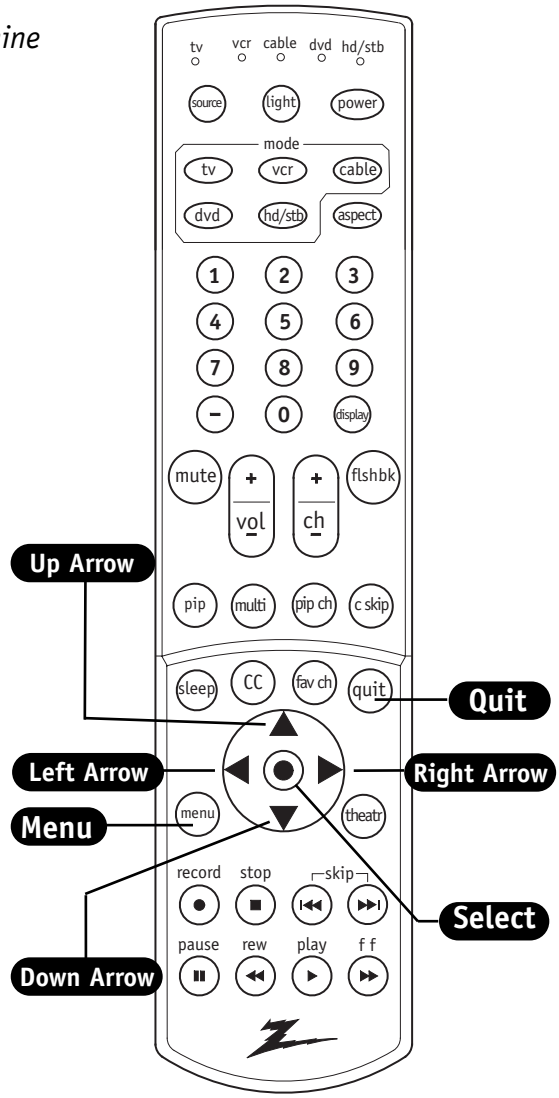
1 Press MENU to access the Setup menu.

2 Use the UP/DOWN arrow to choose the Channel Review option.

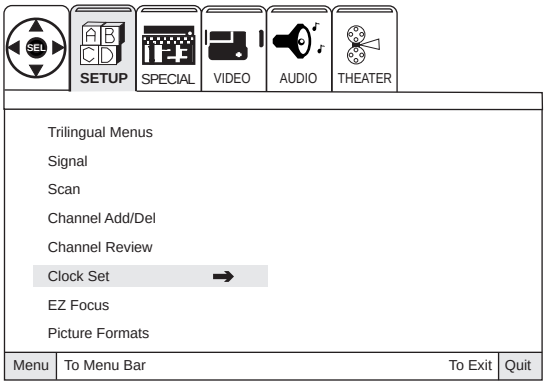
3 Use the RIGHT arrow button to activate the Channel Review menu option.

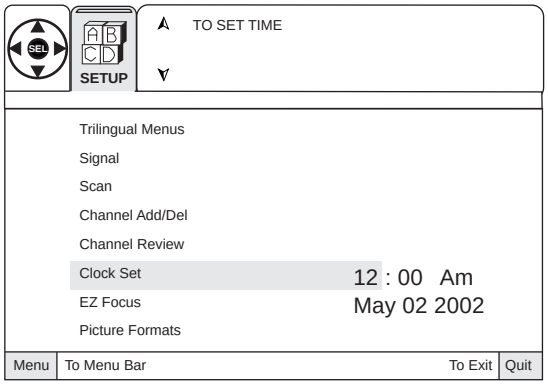
4 Use the UP/DOWN arrow button to cycle through your channel list and review the settings. (Each press of Up/Down arrows will display the next eight channels.)

5 Press QUIT to exit.



Clock Set





Set the clock on your Entertainment Machine

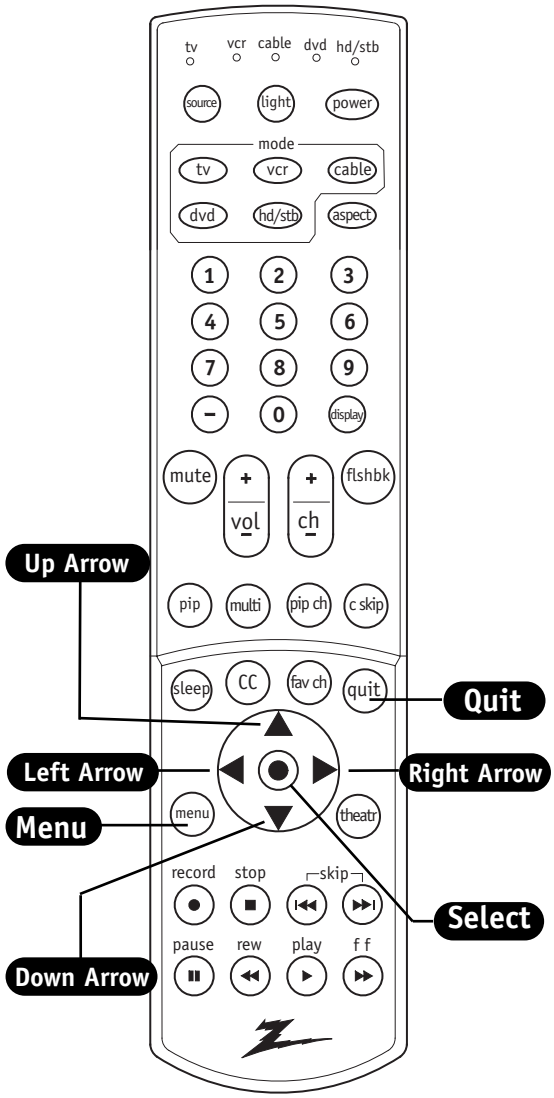
1 Press the MENU button on your remote to access the Setup menu.

2 Use the UP/DOWN arrow to choose Clock Set.

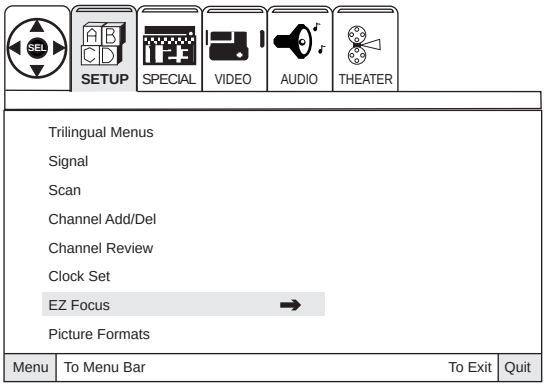
3 Use the RIGHT arrow button to set the clock on your Entertainment Machine.

4 Use the RIGHT arrow button to choose first the time option and use the UP/DOWN arrow buttons to adjust time options. Press the RIGHT arrow button and then use the UP/DOWN arrow buttons to adjust month/date/year options.

5 Press QUIT to save and exit.



EZ Focus (Color Convergence)



Adjust red, blue, and green color convergence for optimum picture appearance

1 Press the MENU button on your remote to access the Setup menu.

2 Use the UP/DOWN arrow to choose EZ Focus.

3 Press the RIGHT arrow button to go to the EZ Focus convergence menu.

4 Press SELECT on the thumbstick to go to EZ FOCUS menu.

5 Press MENU repeatedly to choose the color to adjust: Red or Blue.

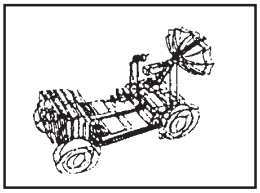
There are 9 color convergence points. Align the Middle Center point first. Press 5 on the number keypad to select the Middle Center convergence point. Use the thumbstick, up/down/left/right arrows to move the color bar so that it lines up exactly over Green. (Green is stationary and does not move.)

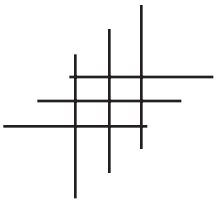
Adjust the other convergence points by selecting them with the number keypad, press the numbers indicated to select:

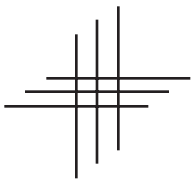
1=Upper Left	2=Upper Center	3=Upper Right
4=Middle Left	5=Middle Center	6=Middle Right
7=Bottom Left	8=Bottom Center	9=Bottom Right

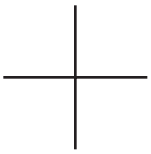
Press MENU to change the color. Align the selected color convergence points as instructed above. When convergence is correct, the convergence point color is white.

Press MULTI or QUIT to remove color convergence menu and store your color convergence changes. (To return to the previous color convergence alignment, press POWER or PIP. No convergence changes will be stored and the TV will revert back to the previous convergence setup when it is turned on again.)

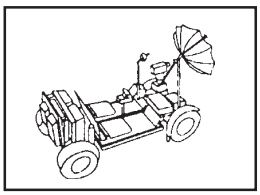


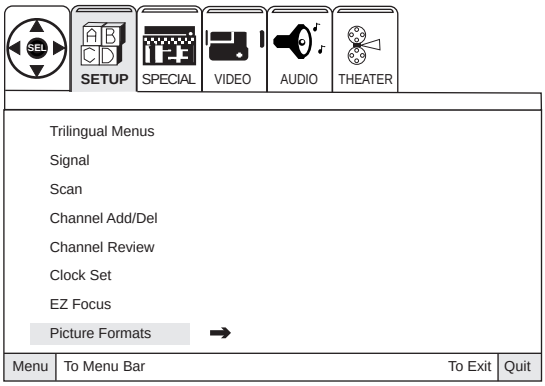


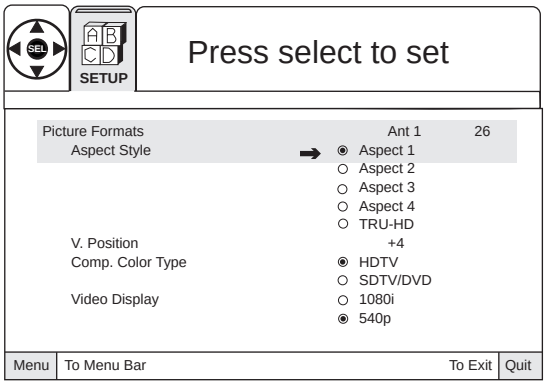




Red, Blue, over Green.
Correct Convergence=White







Fine-tune High Definition and standard NTSC analog signal source images

1 Choose the source you want to set the picture format for.

2 Press the MENU button on your remote to access the Setup menu.

3 Use the UP/DOWN arrow to choose Picture Formats.

4 Use the RIGHT arrow button to access the Picture formats Menu.

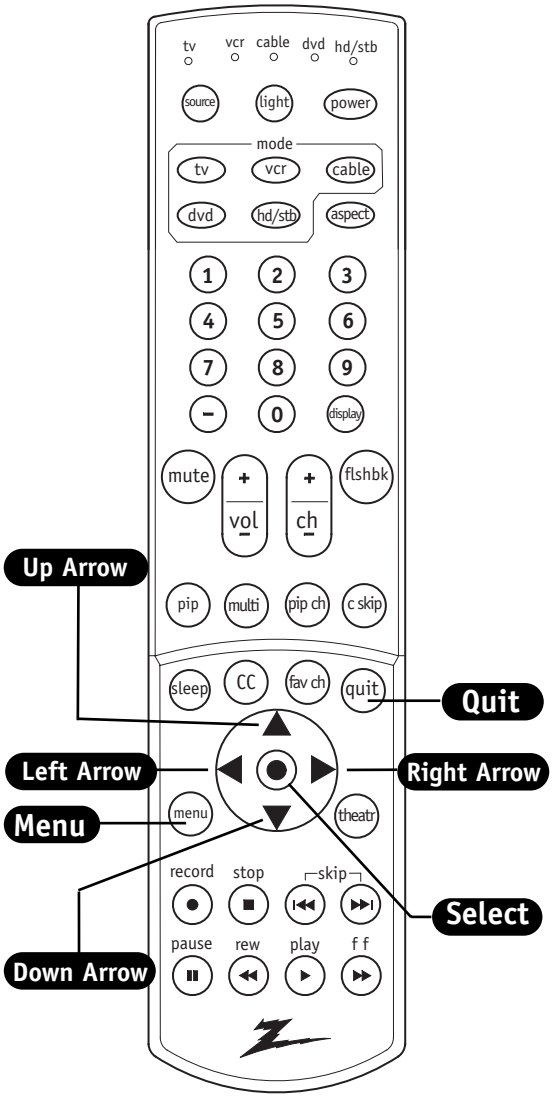
5 Choose and set the options based on your equipment's signal requirements for high-definition or standard NTSC sources.

Aspect Style	Aspect 1, Aspect 2, Aspect 3, Aspect 4, Aspect 5, TRU-HD
V. Position	Image vertical position on screen
Comp. Color Type	HDTV, SDTV/DVD
Video Display	1080i, 540p

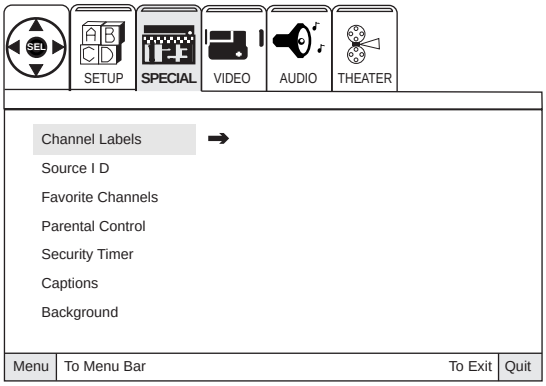
6 Press SELECT to set and confirm your settings.

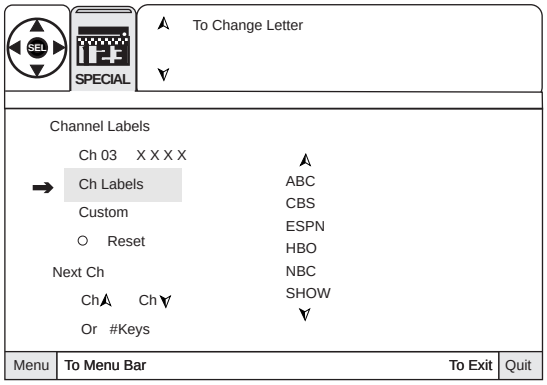
7 Press QUIT to save and exit.

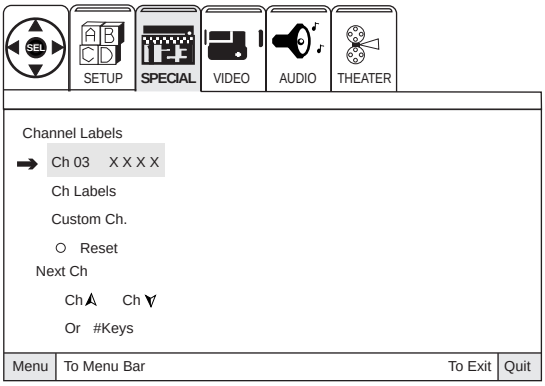
Note: 1080i signal source settings are fixed while other signal source formats are adjustable. (1080i=1080i)
(TV converts 720p to 540p, 480p to 540p, 480i to 540p.)

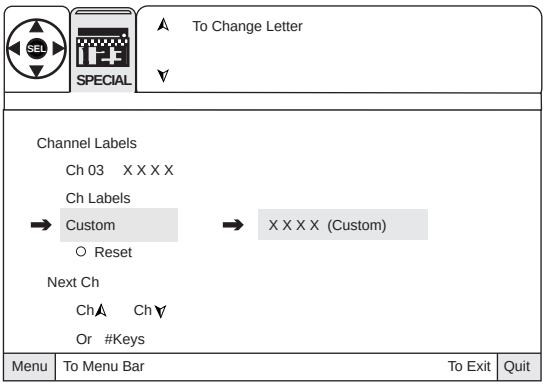


Channel Labels









Use the preset labels to name the channels or create your own channel labels on your Entertainment Machine

1 Tune to a channel you want to label.

2 Press MENU on your remote and then use the RIGHT/LEFT arrow button to access the Special Menu.

3 Use the UP/DOWN arrow to choose Channel Labels.

4 Press the RIGHT arrow button to activate the Channel Labels option.
At this point you have three options:
- Select a pre-set channel label by choosing Ch Labels.
- Customize a channel label by choosing Custom Ch.
- Delete a channel label entirely by choosing Reset.

5 Use the UP/DOWN arrows to choose an option.

5a If you chose Ch Labels, press the RIGHT arrow button to access the preset channel label list and scroll through this list using the UP/DOWN arrow buttons.
When you find the appropriate label for the channel, press the SELECT button.

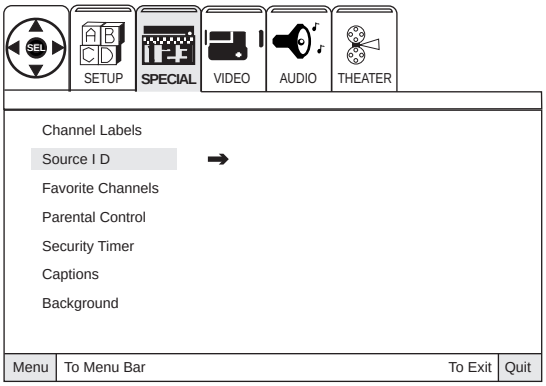
5b If you select Custom Channel, press the RIGHT arrow button once and then use the UP/DOWN arrow buttons to select individual letters and LEFT/RIGHT arrow buttons to choose placement of letters.

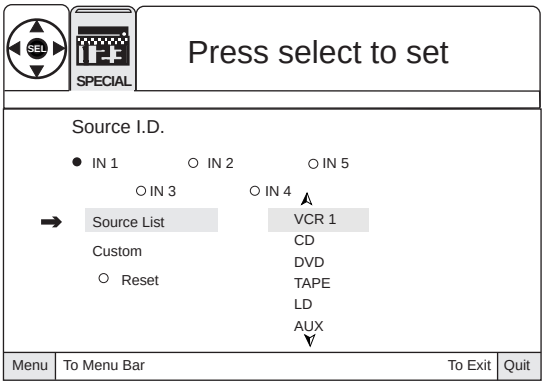
5c If you wish to delete a channel, choose Reset using the UP/DOWN arrow buttons from Step 5, and then press the SELECT button on your remote. You will be asked "Are You Sure?" press SELECT again to delete.

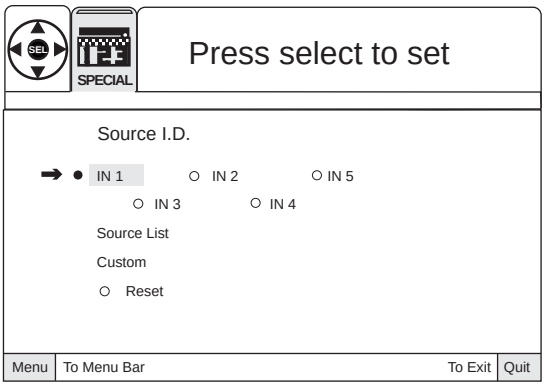
6 Use CHANNEL UP/DOWN buttons or the NUMBER KEYPAD and choose another channel to label. Repeat steps 5-6-7 for all channels you wish to label.

7 Press QUIT to save and exit.

Source ID







Note: When you label Input 1, Input 2, etc. the TV will automatically change to the source of the last source labeled. To return to your original viewing source, press the Source button on the remote repeatedly until you see the picture you were originally watching.

Choose preset names or create your own titles for the available picture/sound input sources on your Entertainment Machine

1 Press MENU and the RIGHT/LEFT arrow button to access the Special Menu.

2 Use the UP/DOWN arrow to select Source ID.

3 Press the RIGHT arrow button to activate the Source ID option.

4 Use the RIGHT arrow button to choose In 1, In 2, In 3, In 4, or In 5 (for front video jacks).

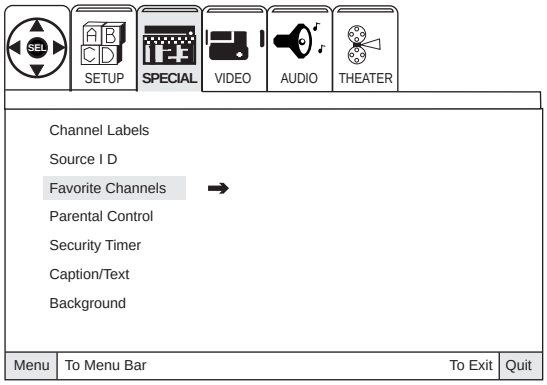
5 Use the UP/DOWN arrow buttons to go to Source List to choose a pre-set Source identification, go to Custom to create your own label, or pick Reset to clear all labels.

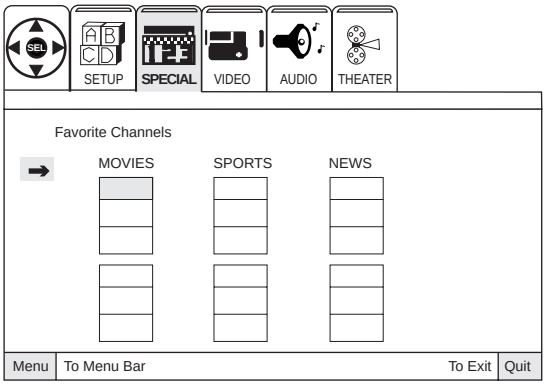
6 If you chose Source List, press the RIGHT arrow button to access the list and then use the UP/DOWN arrow buttons to pick an ID from the list. Press SELECT to save your choice.

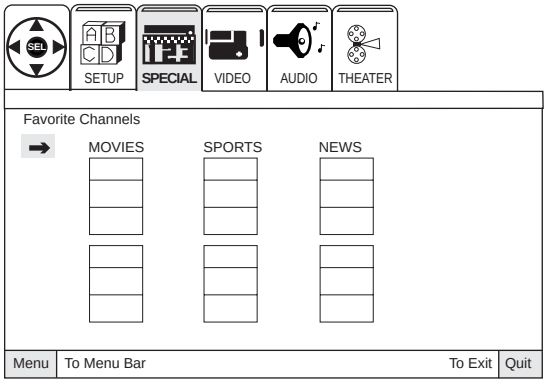
7 If you wish to customize your source ID, go to Custom (from Step 5), then press the RIGHT arrow button. Cycle through the character choices using the UP/DOWN buttons and cycle through the character slots using the RIGHT arrow button. Press QUIT to save your choice and exit.
Note: Use * for blank spaces.

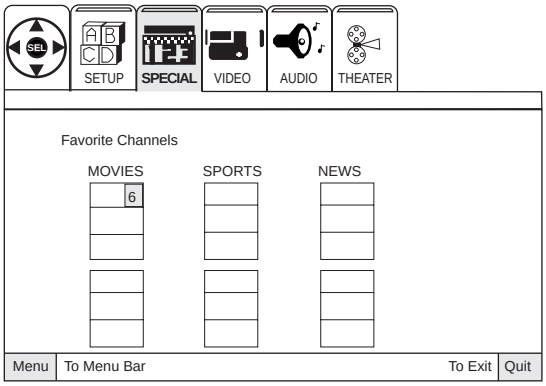
8 To delete a Source ID, select Reset (from Step 5), then press the SELECT button. You will be asked "Are You Sure?" Press SELECT again and then press QUIT to save and exit.

Favorite Channels









Group your favorite channels into categories

1 Press MENU and then RIGHT/LEFT arrow button to access the Special Menu.

2 Use the UP/DOWN arrow to choose Favorite Channels. Press the RIGHT arrow button to activate Favorite Channels option.

3 Use the RIGHT arrow button to choose a Favorite Channels category such as Movies, Sports, News, Sitcom, Music or Custom, or use Up/Down to create your own category.

4 Once you have chosen a category, press the DOWN arrow button to pick a slot for the Favorite Channel in that category.

5 Use the NUMBER keypad to enter the channel number you want to include in that category. Wait three seconds and the channel number will go into the first inset to the right. Use the UP/DOWN arrow buttons to choose the next channel number entry. Repeat these steps for all categories.

6 To access your favorite channels categories, simply press the RIGHT arrow button repeatedly while watching TV. Use the UP/DOWN arrow buttons to scroll through the Favorite Channels you have set up.

7 While in Favorite Channels Mode, press the MENU button on your remote and after a short time you will see three channel (Pop-3) still frame insets representing three of the six Favorite channels you have selected for that category to the right of your viewing area.

Movies 3 6 8 10 14 22	3 6 8

Notes
- Favorite Channels are only available on ANT 1 source.
- If Parental Control Ratings are locked, it will disable multiple channel insets (including the Favorite Channels POP-3 insets).
- When POP-3 favorite channel is on, Closed Caption option will not appear.
- If Closed Caption is set to Auto and Mute is on, Favorite Channels cannot be accessed.

Overview

Parental Control offers the user a wide variety of options and settings that restrict or "block" the programming that can appear on the TV. Parental Control allows the user the capability of defining which program rating they consider acceptable, to the younger or more sensitive viewer. It can be preset and turned either on or off by the user who specifies the secret 4-number code, the password. Viewer ratings are specified for both TV and the motion picture industry; both rating systems should be used for complete coverage. These ratings are based mainly on children's ages. See the Parental Control menu and submenus example on the next page.

Things to Consider before Setting Up Parental Control View or Block options

• Determine which rating you consider acceptable to the viewer. (For example, if you choose TV-PG, all more restrictive ratings will be automatically blocked; the viewer will not be able to see: TV-PG, TV-14, or TV-MA rated programming.)

• Do you want to block individual channels or input sources? (Blocks the signal sent by the equipment, such as a VCR, connected to the TV Audio/Video input jacks.) Or leave unblocked, then choose allowable ratings.

• Lock the front panel controls so they cannot be used with the Front Panel Lock option.

• Select a secret password; in the Set Password option. Use the number keys on the remote. Don't forget the password, it is the only way you can access the Parental Control menu and change rating selections, or turn Parental Control off.

MOTION PICTURE ASSOCIATION OF AMERICA (MPAA) RATING SYSTEM

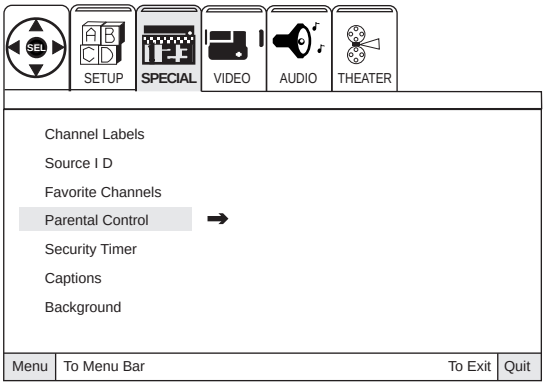
G	General Audiences	Content not offensive to most viewers.
PG	Parental Guidance Suggested	Content is such that parents may not want their children to view the program.
PG-13	Parental Guidance Suggested	Program is inappropriate for preteens, with a greater degree of offensive material than a PG rated program.
R	Restricted viewing	Not for children under age 17. Strong elements of sex and/or violence.
NC-17	Restricted Viewing	Not for children under age 17 under any circumstances. Strong sexual content.
X	Hard Core Films	Same as NC-17 rating.

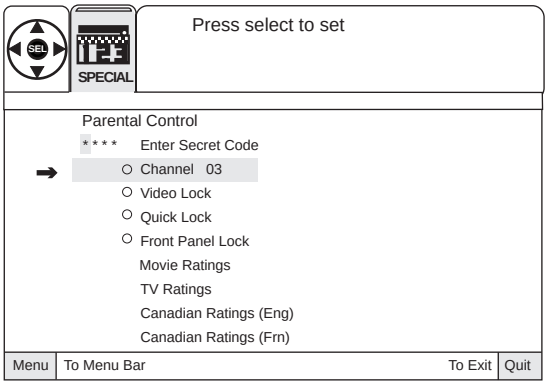
Note: Zenith Electronics Corporation is not liable for any program content that appears when using this rating system; as always, user discretion is advised.

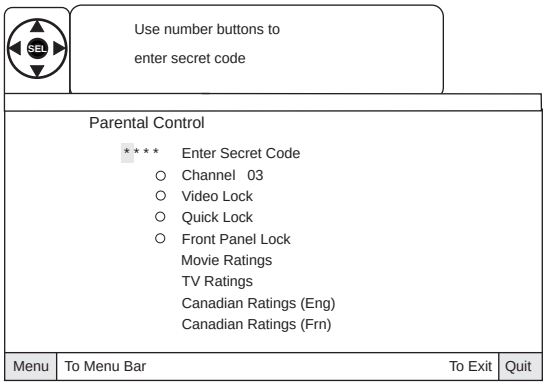
TV PARENTAL GUIDELINE RATING SYSTEM

TV-G	General Audience	Considered suitable for all audiences; children may watch unattended.
TV-PG	Parental Guidance Suggested	Unsuitable for younger children, may contain: Suggestive Dialog, Bad Language, Sex, and Violence Scenes.
TV-14	Parents Strongly Cautioned	Unsuitable for children under 14, may contain: Strong Dialog, Bad Language, Sex, and Violence Scenes.
TV-MA	Mature Audience Only	Adults only, may contain: Strong Dialog, Bad Language, Sex, and Violence Scenes.
CHILDREN'S CLASSIFICATIONS		
TV-Y	Children	Considered suitable for all children under 7 years old.
TV-Y7	Children 7 and over	Considered suitable for children over 7, may contain Fantasy Violence Scenes.

Parental Control Setup







Using Parental Control Notes

- Select the input source first in order to use Video lock; press the source button repeatedly on the remote until you select Input 1, Input 2, Input 3, Input 4, or Input 5. The same applies to unlocking the Video Lock.
- If Ant 1 and Ant 2 are set to the same signal source mode, and if a channel is locked, it is locked on both Ant 1 and Ant 2 inputs.
- Be sure the TV's internal clock is set before using any Parental Control options.
- Text automatically appears on the screen to indicate if Parental Control (Child Lock) is activate.

Restrict programming/input sources available to your TV's viewers

1 Press MENU and then use the RIGHT/LEFT arrow button to access the Special Menu.

2 Use the UP/DOWN arrow to choose Parental Control and then press the RIGHT arrow button to activate Parental Control.

3 When prompted, enter the default code 7777 from the number keypad. If you wish to change the code, select "Change Secret Code" and enter the new code through the number keypad. If you forget your code, just re-enter "7777" to reset to factory preset code.

4 Use the UP/DOWN arrow button to choose your Block options, press SELECT to confirm your choice:

- **Channel:** Selects the channel you wish to restrict. (This option only works if TV is tuned to Antenna 1 or Antenna 2)
- **Video Lock:** Selects the Video Inputs to be blocked. (This option only works if TV is tuned to a video source.)
- **Quick Lock:** Blocks CH3 and CH4 on ANT 1 and 2, as well as all 3 video input jacks.
- **Front Panel Lock:** Blocks front panel controls from being used. Only Power button will work when this feature is on.

5 Now you will set the Ratings for the channel you wish to block. Press the UP/DOWN arrows to select the following rating formats and press the RIGHT arrow button to activate each rating menu:

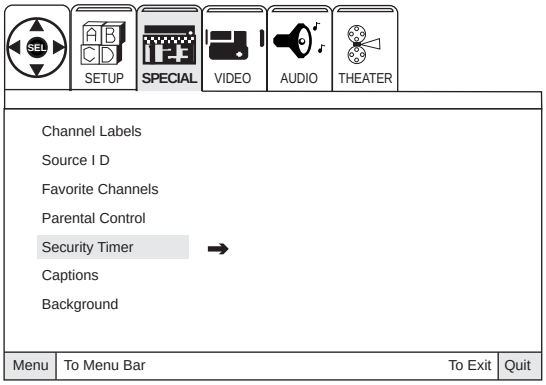
- **Movie Ratings:** Sets ratings based on MPAA ratings system.
- **TV Ratings**: Sets ratings based on the age of viewer and content of programming.
- **Canadian Ratings (Eng):** Sets age ratings for Canadian broadcasting (Eng).
- **Canadian Ratings (Frn):** Sets age ratings for Canadian broadcasting (Frn).

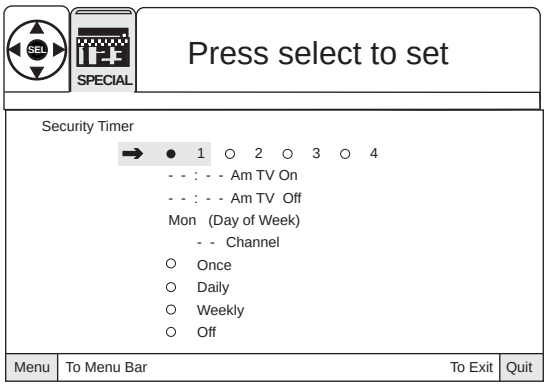
6 For each rating menu, use the UP/DOWN arrow buttons to choose the level of rating you wish to block.

7 Press the SELECT button to lock or unlock the rating selection.

8 Press QUIT to save and exit.

Security Timer





Use the Security Timer to program your TV to turn on, tune to the preset channel, and then turn off automatically at the times specified

1 Press MENU and use the RIGHT/LEFT arrow button to access the Special Menu.

2 Use the UP/DOWN arrow to choose Security Timer. Press the RIGHT arrow button to go to the Security Timer option.

3 You may set up to four ON/OFF times for your TV. Use the RIGHT arrow button to choose 1-4, then press the DOWN arrow button to go to the TV On Time option.

4 Press the RIGHT arrow to set On time. Set time using the LEFT/RIGHT and UP/DOWN arrow buttons (the same way you set the TV's clock).

5 Press the LEFT arrow button repeatedly until the cursor appears to the left of the current line item.

6 Use the DOWN arrow button to choose Day, press the RIGHT arrow. Use the UP/DOWN arrow to choose which day of the week (if necessary).

7 Press the LEFT arrow button repeatedly until the cursor appears to the left of the current line item.

8 Use the DOWN arrow to choose Channel. Set the channel for the TV to tune to by entering the channel number using the number keypad.

9 Press the LEFT arrow button repeatedly until the cursor appears to the left of the current line item.

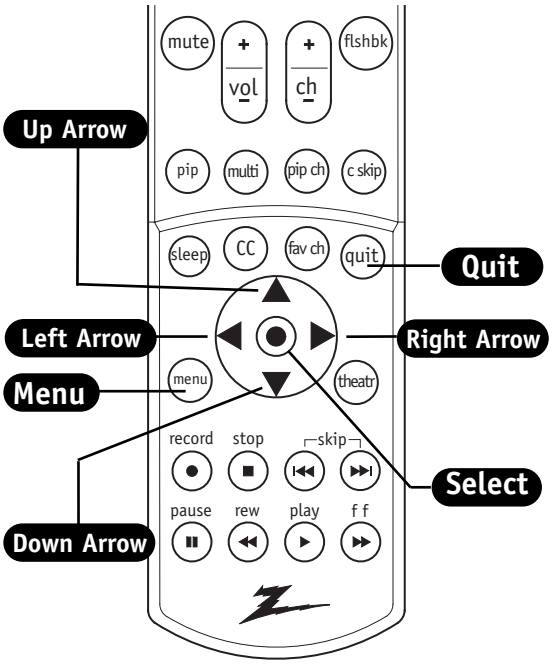
10 Use the UP/DOWN arrow buttons to choose Once, Daily, Weekly or Off. Press SELECT to confirm your selection.

11 Repeat steps 3-8 for three more "events" or press QUIT to save and exit.

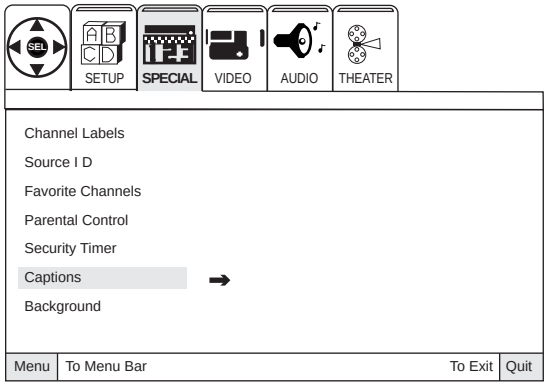
Using Security Timer Notes

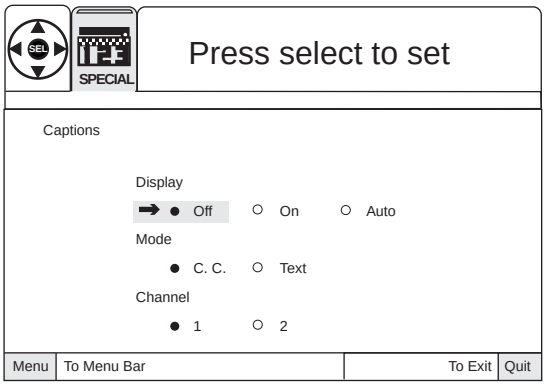
• Security Timer is designed to program the TV to turn on and off automatically. If the On Timer turned the TV on and you change channels, the Off timer is deactivated -- then if no remote key is pressed, the TV turns off automatically after three hours.

CAUTION: For safety reasons, it is not recommended to use the Security Timer feature to turn your TV on and off while no one is at home.



Captions





Set the Caption/Text options for your Entertainment Machine

1 Press MENU and the RIGHT/LEFT arrow button to access the Special Menu.

2 Use the UP/DOWN arrow to choose Captions. Press the RIGHT arrow button to activate Captions option.

3 Use the LEFT/RIGHT arrow to choose Display Off, On, or Auto option. Press Select to turn captions Display On, Off, or Auto.

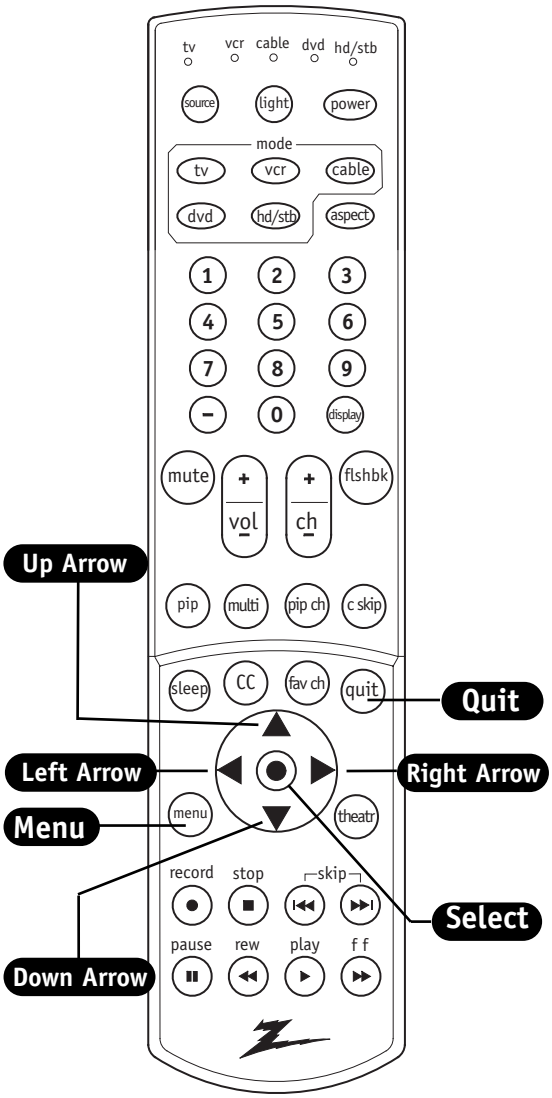
On Caption/text option appears (if available on program).
Off Caption/text option does not appear.
Auto Caption/text option appears when sound is muted.

4 Press the DOWN arrow button to choose the mode, "C. C." for Closed Captions or "Text" for Text. Use the RIGHT arrow button to choose and press Select to set.

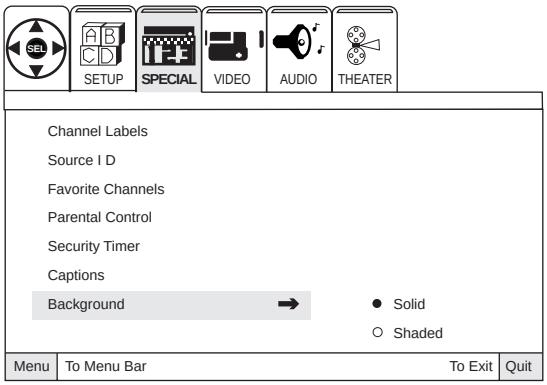
5 Press the DOWN arrow button to go to the Channel option. Use the RIGHT arrow to specify caption/text Channel 1 or Channel 2. (Usually this option is set to Channel 1.) Press Select to set and confirm your choice.

6 Press QUIT to save and exit.

If the POP-3 feature is displayed on the screen, the selected Closed Caption option will not appear.



Background



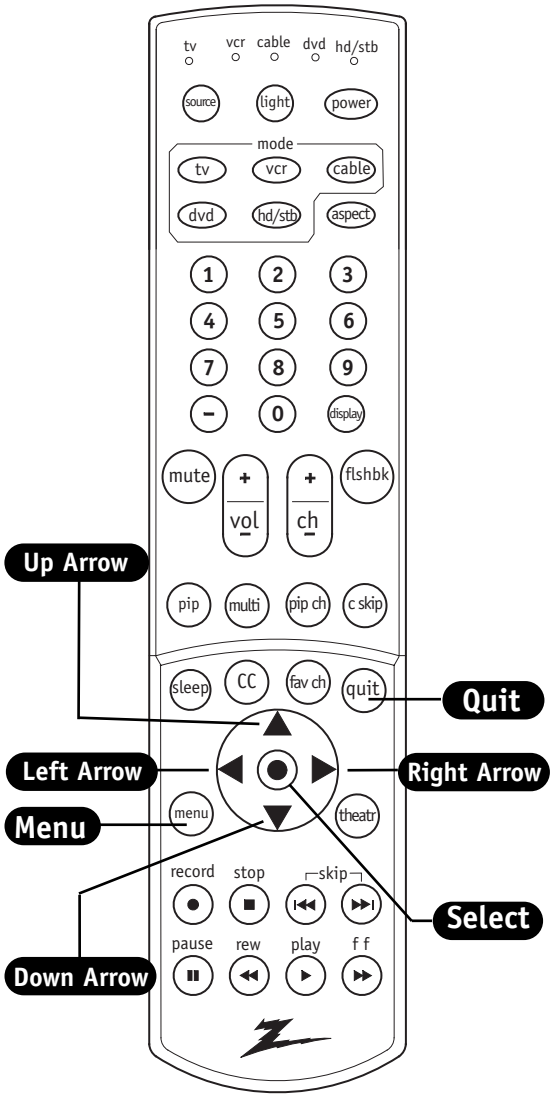
Select Solid or Shaded for the menu backgrounds

1 Press MENU and use the RIGHT/LEFT arrow button to access the Special Menu.

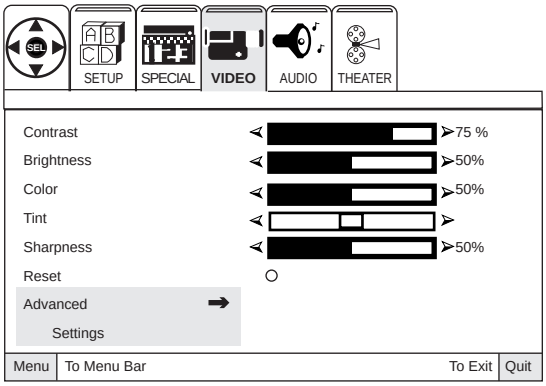
2 Use the UP/DOWN arrow to choose Background. Press the RIGHT arrow button to activate the Background option.

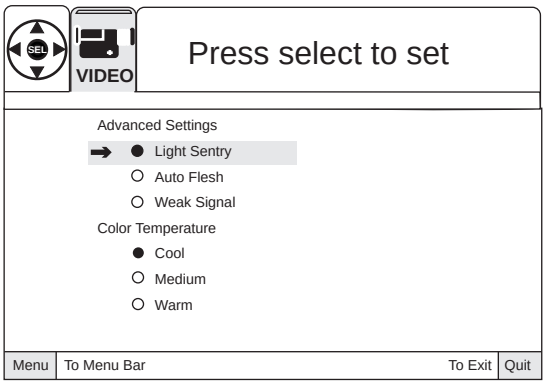
3 Use the UP/DOWN arrow to choose Solid or Shaded.
Solid Picture is not visible.
Shaded Picture is visible through translucent menu.

4 Press QUIT to save and exit.



Video Menu





Customize the picture appearance

1 Press MENU and use the RIGHT/LEFT arrow to access the Video Menu.

2 Use the UP/DOWN arrow to choose one of the following options. Press the RIGHT/LEFT arrow button to activate that option (For these items only, the adjustment bar will drop to the bottom of the screen, continue with normal operation.):

- **Contrast:** Changes the amount of difference between black levels and white levels in your picture.
- **Brightness:** Increases or decreases the amount of white in your picture.
- **Color:** Adjust levels of all colors.
- **Tint:** Adjust the relative amounts of the color red and green in your picture.
- **Sharpness:** Raise or lower the definition of the picture. The lower the level, the softer the image will appear.
- **Reset:** To return setting to original levels.

3 Use the UP/DOWN arrow to choose Reset (Reset restores the levels to their original settings). Press SELECT to confirm your choice.

4 Use the UP/DOWN arrow to choose Advanced Settings. Press the RIGHT arrow button to activate the Advanced Settings menu.

5 Use the UP/DOWN arrow to choose from the following options. Press SELECT to confirm your choice:

- **Light Sentry:** Automatically monitors and adjusts contrast depending on room lighting to produce a more natural picture. Also adjusts Auto Flesh Tone and Video Filter depending on signal.
- **Auto Flesh:** Automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes.
- **Weak Signal:** Automatically reduces conspicuous noise in the picture without degrading picture quality.

6 Use the UP/DOWN arrow to choose the following options. Press the RIGHT arrow button to choose a setting for this option:

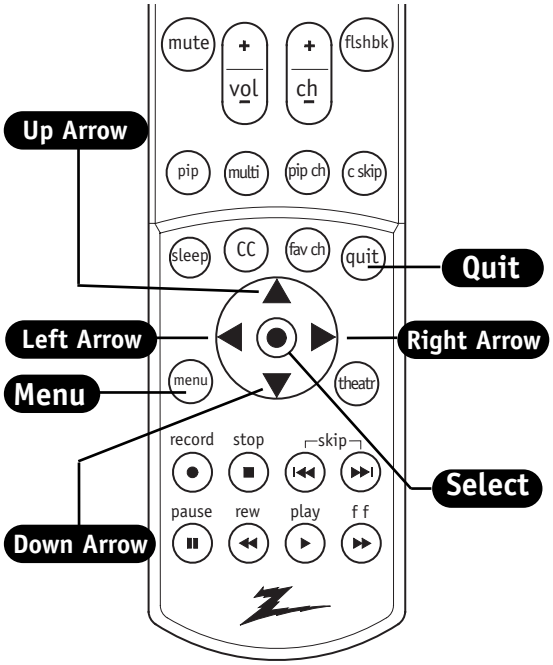
- **Color Temperature:** Set this to Warm for hotter colors such as red, set to Cool for less intense colors with more blue, or Medium for normal color appearance.

7 Press QUIT to save and exit.

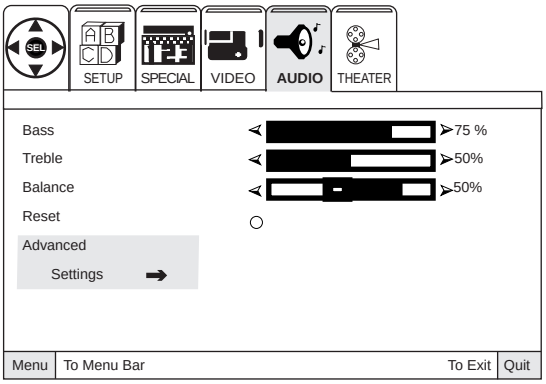
Video Menu Notes

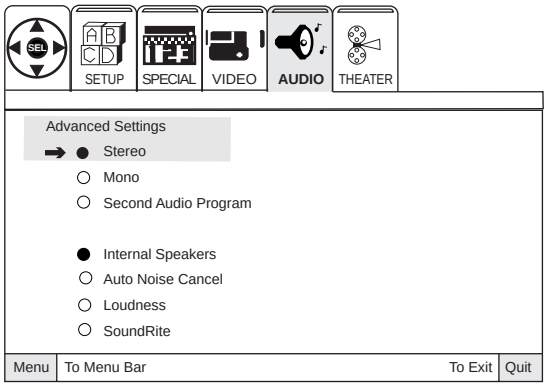
• It may be necessary to adjust TINT for optimum picture quality, when viewing component video sources (Y-PBPR) connected to Inputs 3/4.

• When viewing component video sources (Y-PBPR) connected to Inputs 3/4, if the TINT and COLOR in the picture appear to be abnormal, check to be sure that the correct Component Color Type is selected for the Picture Formats option on the Setup menu.



Audio Menu





Customize the sound to your preference

1 Press MENU and use the RIGHT/LEFT arrow button to access the Audio Menu.

2 Use the UP/DOWN arrow to choose one of the following options. Use the RIGHT/LEFT arrow buttons to adjust that option.

- **Bass:** Increase/decrease lower-end sounds.
- **Treble:** Increase/decrease higher-end sounds.
- **Balance:** Allows you to put the sound more to the left or right channel.

Use the UP/DOWN arrow to choose Reset (Reset restores the levels to their original settings). Press SELECT to confirm your choice.

3 Use the UP/DOWN arrow to choose Advanced Settings. Press the RIGHT arrow button to activate the Advanced Settings menu.

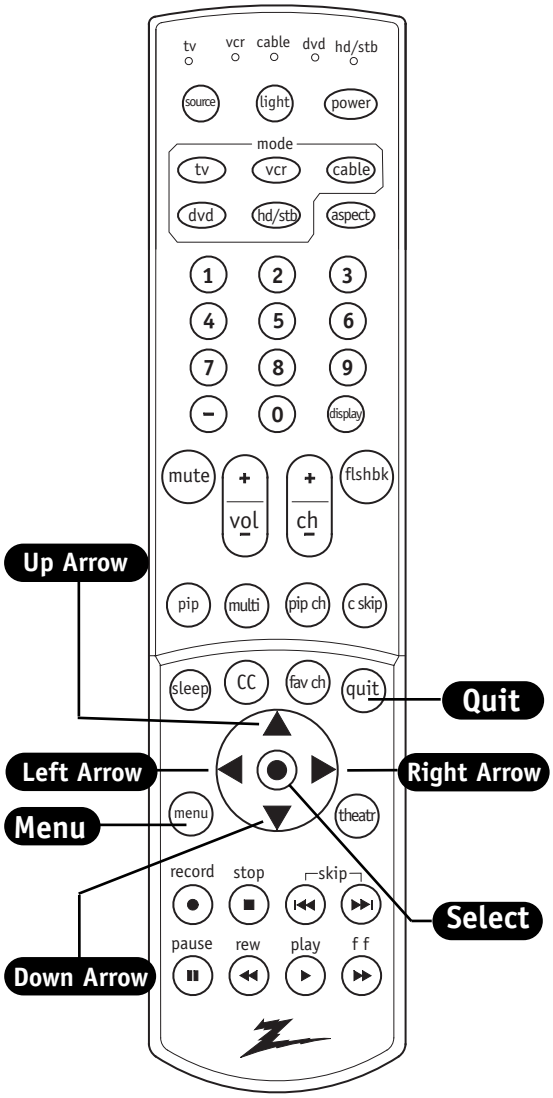
4 Use the UP/DOWN arrow to choose from the following options. Press SELECT to confirm your choice:

- **Stereo:** Activate stereo sound.
- **Mono:** Activate mono sound.
- **Second Audio Programming:** Activates separate audio channel available with some programming.
- **Internal Speakers:** This function is useful when first setting up external speakers, or if you prefer to use only speakers from a separate stereo system.
- **Auto Noise Cancel:** Use to eliminate the noise between stations.
- **Loudness:** This function will improve the quality of both low and high frequency sounds when listening at low volume levels.
- **SoundRite:** This function will automatically adjust volume so each channel has the same average volume level.

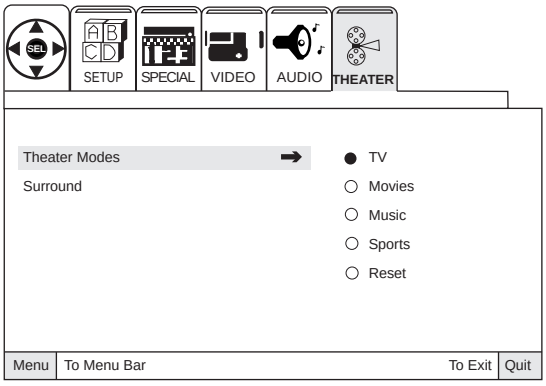
5 Press QUIT to save and exit.

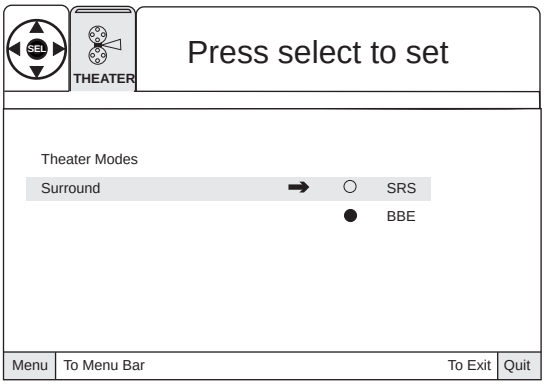
Not all programming is broadcast in stereo sound, or has Second Audio Programming/SAP.

Programming that doesn't broadcast SAP may be silent when you set your Entertainment Machine on this setting.



Theater Modes Menu





Set Theater Modes to your preference

1 Press MENU and then the RIGHT/LEFT arrow button to access the Theater menu.

2 Press DOWN arrow button to access the Theater Modes or Surround.

3 To change Theater Modes, press RIGHT arrow button to choose Theater Modes option.

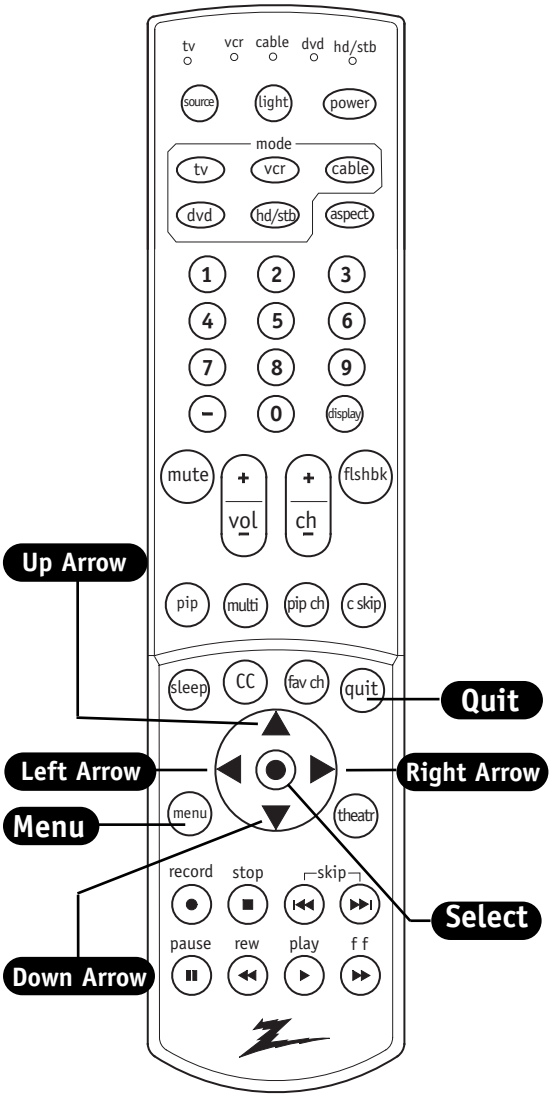
4 Use the UP/DOWN arrow buttons to choose which mode you prefer. Each is a preset setup designed to enhance your viewing experience.

5 Use the UP/DOWN arrow to choose Reset (Reset restores the levels to their original settings). Press SELECT to confirm your choice.

6 To activate SRS® or BBE®, choose the Surround option, then choose SRS and/or BBE. Turn them on or off depending on your preference.

7 Press SELECT to set and confirm your choice(s).

8 Press QUIT to save and exit.



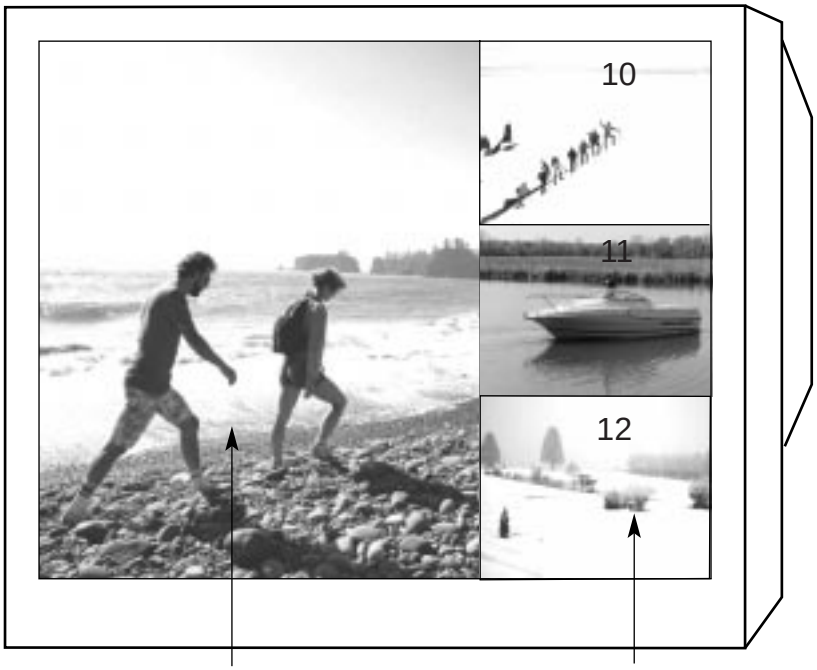
SRS retrieves the spatial information from any stereo recording and restores the original three-dimensional sound field. As a result, the reproduced sound is much closer to that of a live performance.

BBE improves the sound from all audio sources, providing a more complete high-definition reproduction of the original performance.

SRS and the (●) symbol are trademarks of SRS labs, Inc.
SRS technology is incorporated under license from SRS Labs, Inc.

Licensed by BBE Sound, Inc. under USP4638258 and 4482866. BBE and the BBE symbol are registered trademarks of BBE Sound, Inc.

POP-3 (Picture-On-Picture) Overview

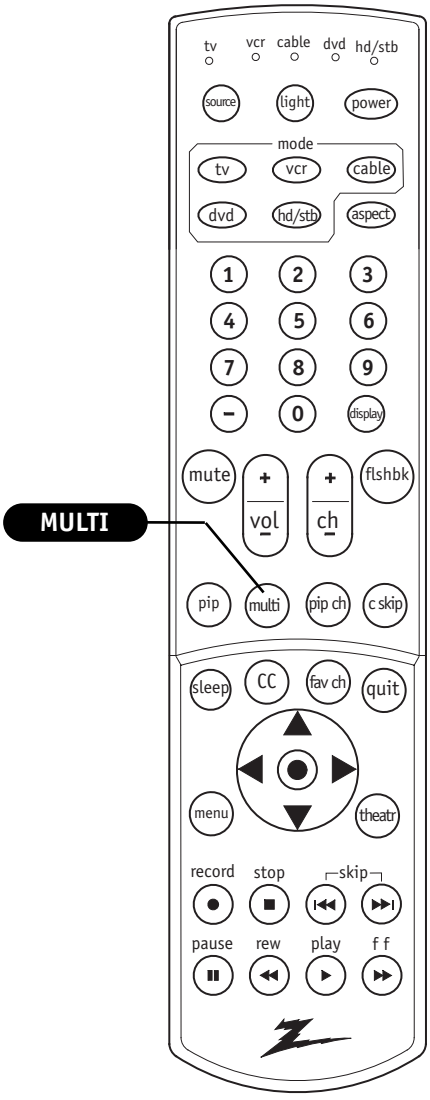


POP-3 shows multiple channels on the screen

1 With the TV on and Ant 1 source shown on-screen, press MULTI on the remote to turn on the POP-3 feature.

POP-3 shows three additional channels on the right side of the screen. The multi-channel display also includes the channel number for reference. POP-3 will continue to display all the channels continuously, three channels at-a-time.

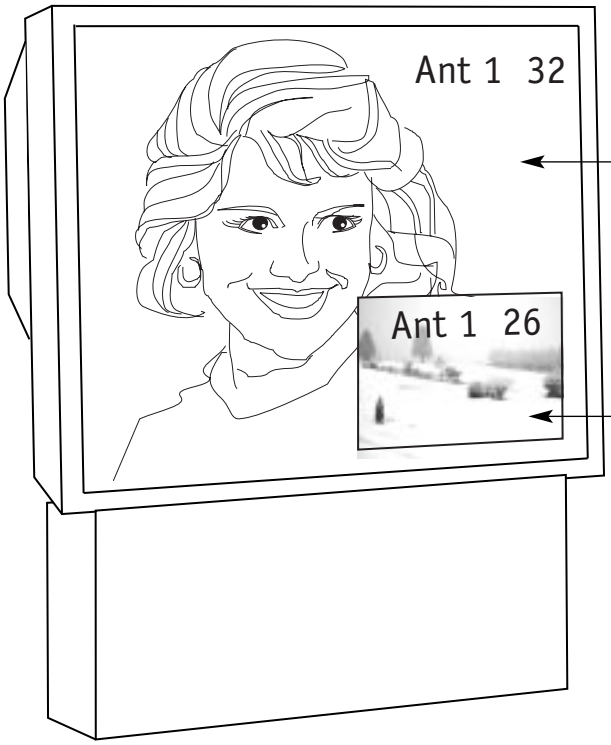
2 Press MULTI again to turn POP-3 off.



POP-3 is only available on Antenna/Cable 1 source.

Closed Captioning will not appear if POP-3 is active.

PIP Overview and Setup



Ant 1 Source
Main Picture
Channel 32

Ant 1 Source
PIP Picture
Channel 26
Note: Use Thumbstick to move PIP inset.

PIP shows two live channels on the screen at the same time

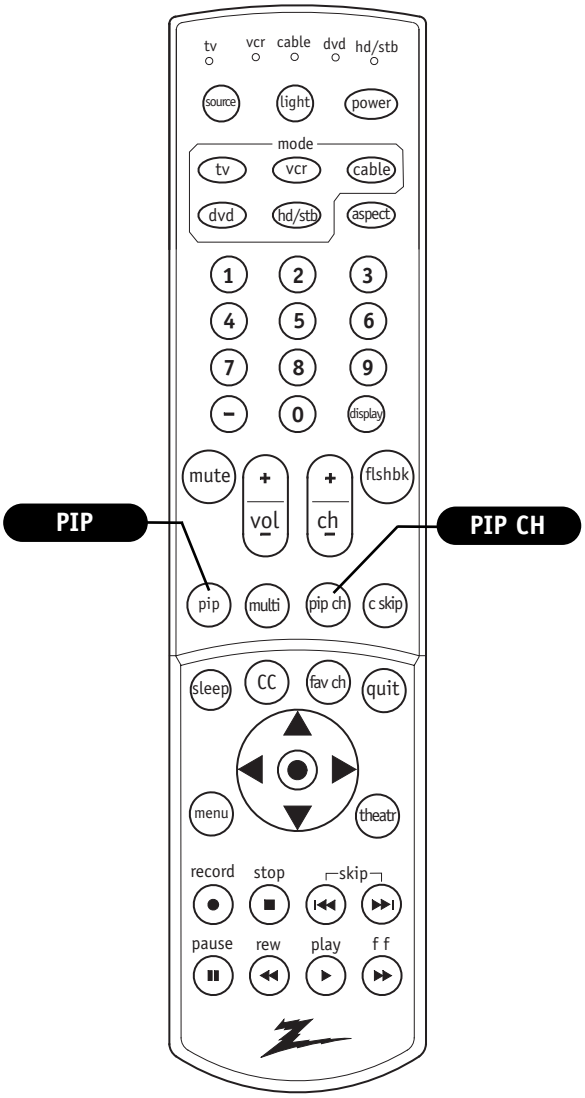
1 With the TV on and Ant 1 source shown on-screen, press PIP on the remote to turn PIP (Picture-in-Picture) on.

2 Press PIP CH to switch from main screen channel tuning to the PIP inset picture channel tuning.

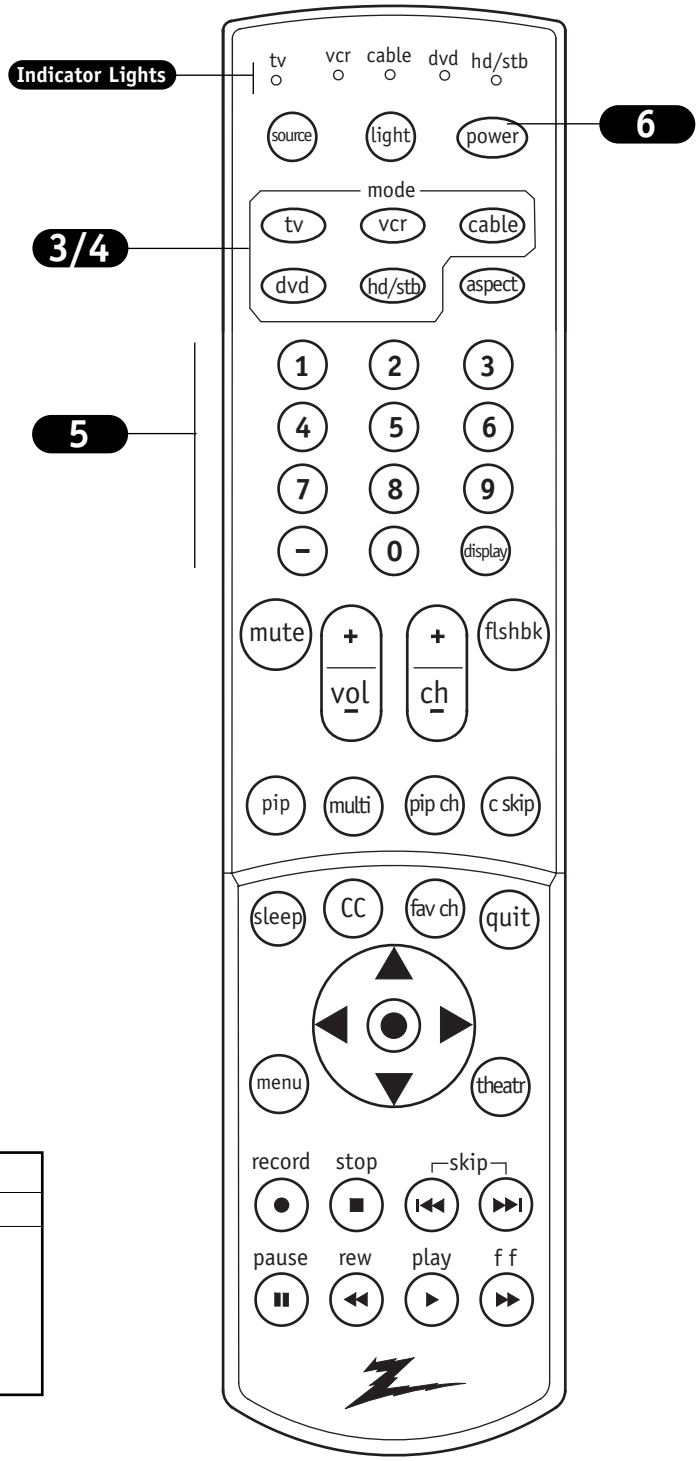
3 Tune to a channel for the PIP inset picture.

4 Press PIP CH to switch channel tuning back to the main screen.

5 Press PIP again to remove the PIP picture and return to one channel viewing.



Program your remote to operate a variety of Audio/Video devices



1 The device you want to program the remote to operate should be turned ON.

2 On the next two pages are the Name Brand Product Programming Codes, find the type of device you're programming and then find the brand name. Write down the three-number codes.

3 Push the mode key with the name of the device you're programming (VCR, CABLE, DVD, HD/STB).

4 Hold down the mode key (VCR, CABLE, DVD, HD/STB) until the indicator light turns on, continue holding down the mode key.

5 Using the NUMBER keypad, enter the three-number Brand Code found in the chart on the Brand Code reference pages (following two pages). The indicator light will flash three times and turn off if the code was accepted. Release the mode key.

6 Point the remote at the device and press the POWER key. The device should turn off. If not, try the other 3-number codes listed and continue from step three.

Your Zenith remote control may not operate all devices.

Mode / Product Compatibility

TV	VCR	CABLE	DVD	HD/STB
TVs	VCRs	Cable Boxes, Satellite Receivers	Audio CD, Video Disk Audio Tape Decks Audio Tuners Audio Amplifiers	Set-top Boxes

Programming Codes

TVs

Daewoo 149

Zenith 101 121 149 152

TV/VCR Combination Codes

Adventura TV/VCR . 154

Daewoo TV/VCR . . 148

Funai TV/VCR. . . . 154

Goldstar TV/VCR. . 153 172

Symphonic TV/VCR 154

Zenith TV/VCR . . . 150 152 153 154 172

VCRs

Admiral 261

Akai 292 717 718 719 720

Audio Dynamics . . 726

Bell & Howell 247

Broksonic 221 250 255 729

Candle 727

Canon 704

Capeheart 728

Citizen 727

Craig 212

Curtis Mathes . . . 259 266 725 727

Daewoo 244 246 248 254 703 729

Daytron 246

DBX 726

Electrochrome. . . . 730

Emerson 203 221 243 250 293 721 722 729 730 731 732

Fisher 211 212 213 247 265 274

General Electric . . 216 220 266 282 701 702 725

Go Video 256 262 263 700

Goldstar 253

Harmon Kardon . . . 296

Hitachi 257 270 273 292 705 706 707 708

J.C. Penny 268 726

Jensen 292

JVC 224 225 258 268 292 299 726

Kenwood 268 292 726 727

Magnavox 275

Marantz 267 268 726 727

Memorex 212 298

MGA 297 730

Mitsubishi 276 277 278 279 280 296 297 730

Montgomery Ward 216 219 249 291 730

MultiTech. 727

NEC 267 268 269 281 292 709 726

Orion 250

Panasonic 245 251 259 713 714 715 716

Pentax 708 727

Philco 275

Pioneer 210 282 726

Portland 246 727

ProScan 216 260 266 282 725

Quasar 259 295

Radio Shack 213 265 730

RCA 216 220 228 240 242 249 260 266 282 283 284 285 286 287 288 708 710 711 725

Realistic 212 213 265 730

Saisho. 722

Salora 297

Samsung 220 230

Sansui 289 292 709 726

Sanyo 212 247 294

Scott 243 290 729

Sears 211 212 213 265 274

Sharp 261 730

Signature 2000 . . . 216 219 249

Sony 232 723 724

Sylvania 275 297

Tatung 268 292

Teac 268

Teknika 272

Toshiba 213 274 290 297

Vector Research . . 726 727

Victor 726

Video Concepts . . . 726 727

XR - 1000 243

Yamaha 726

Zenith 201 224 225 229

Cable Boxes

Allegro 358 362

Allegro A-B Switch 361

Archer 325

Century 325

Citizen 325

Comtronic 326

Everquest. 379

Garrard 325

Gemini 305 331 338

General Electric. . . 367

General Instrument 304 305 306 307 308 309 310 318

Hamlin 302 303 345 365 366

Jasco 325

Jerrold 304 307 308 309 310 318 360 363

Kale Vision 335

Macom 321

Magnavox 327 334

NSC 335 339 368 369 370

Oak 311 332 342

Panasonic 313 320

Philips 325 327 347 350 352 354 355

Pioneer 315 343

RCA 341

Regency 329

Samsung 326 335

Scientific Atlanta 316 323 336 337 364

Signal 326

SL Marx 326

Sprucer 313

Standard Comp . . . 335

Stargate 326 379

Teleview 326

Texscan 339 356 371

Tocom 317 318 346

Unika 325 348 362

Universal 325 358 362

Vid Tech 340

Video Way 349

Viewstar 327 354 355 372

Zenith HT-2000. . . 353

Zenith PM 374

Programming Codes

Satellite Receivers

Alphastar. 516
Chaparral. 501 502
Cheyenne. 502
Dishnet. 515
Drake 503
General Electric. . . 510 517
General Instrument 504 505
Hitachi 519 520
Hughes Network . . 514
JVC 518
Macom 314
Magnavox 521
Phillips 521
PrimeStar. 513
ProScan. 510 517
RCA DSS 373
RCA 510 517
Realistic 506
Sierra I 502
Sierra II 502
Sierra III. 502
Sony. 511
STS1. 507
STS3. 508
Toshiba 509 512
Uniden 522
United 344
Zenith Drake. 312 330
Zenith Satellite . . 328 351 378 500

DVD Players

JVC 965
Mitsubushi. 964
Pioneer 963
Sony. 962
Toshiba 961
Zenith. 960

Audio CD Players

ADC 940
ADO 939
Aiwa. 938
Akai 937
Denon 935
Dynatech. 953
Emerson 952
Fisher 438 933 951
GE 932
Goldstar 460
Hitachi 950
JVC 949 954
Kenwood 441 931 948
Luxman 930
Magnavox 421 422 433 434
Marantz. 929 947
MCS 928
Mitsubishi 927
Nakamichi 925 926
Onkyo 923 924 946
Optimus 920 921 922
Panasonic 431 432 945
Phillips 421 433 434
Pioneer 431 435 944
Quasar 432
Radio Shack 431 441
RCA 437 943
Sanyo 438 439
Sears 936
Sharp 441 442
Sherwood 449
Sony. 420 443 444 445 934
Soundesign 461 498 901 902
Sylvania 433
Teac 418 419
Technics 432
Toshiba 915
Yahama 414 941 942
Zenith 460 461 498 901 902
Zenith CD Recorder 415

Audio Tape Decks

Sony. 452

Audio Tuners/Amps

Citizen 914
GE 916
Goldstar 460 474
Hitachi 919
JVC 908
Kenwood 484
Luxman 467
Marantz. 903 913
Memorex 485
Nad 904
Nakamichi 493
Onkyo 471 906
Optimus 905
Panasonic 912
Pioneer 470 485 907
Proton 910
Quasar 912
RCA 909
Sharp 483 917 918
Sherwood 900
Sony. 486 489 490 491 492
Soundesign 461 498 901 902
Techniques. 912
Toshiba 915
Victor 908
Zenith 460 461 498 901 902

HD/Set-top Boxes

Echostar 805
Hughes 803
Philips 802
RCA 804
Sony. 801
Zenith. 800

Remote Operating Mode Key Functions

A list of key functions by mode for your remote control

KEY NAME	TV Mode	VCR Mode	Cable Mode	DVD Mode	HD/STB Mode
source	TV Sources	TV Sources	TV Sources	TV Sources	TV Sources
light	Lights Keys 5 Seconds	Lights Keys 5 Sec	Lights Keys 5 Sec	Lights Keys 5 Sec	Lights Keys 5 Sec
power	TV On/Off	VCR On/Off	Cable Box On/Off	DVD On/Off	HD/STB On/Off
tv	Selects TV	Selects TV	Selects TV	Selects TV	Selects TV
vcr	Selects VCR	Selects VCR	Selects VCR	Selects VCR	Selects VCR
cable	Selects Cable	Selects Cable	Selects Cable	Selects Cable	Selects Cable
dvd	Selects DVD	Selects DVD	Selects DVD	Selects DVD	Selects DVD
hd/stb	Selects HD/STB	Selects HD/STB	Selects HD/STB	Selects HD/STB	Selects HD/STB/direcTV
aspect	Selects Aspect Ratio Formats	N/A	N/A	N/A	Selects Aspect Ratio Formats
1	TV Digit 1	VCR Digit 1	Cable Digit 1	DVD Digit 1	HD/STB Digit 1
2	TV Digit 2	VCR Digit 2	Cable Digit 2	DVD Digit 2	HD/STB Digit 2
3	TV Digit 3	VCR Digit 3	Cable Digit 3	DVD Digit 3	HD/STB Digit 3
4	TV Digit 4	VCR Digit 4	Cable Digit 4	DVD Digit 4	HD/STB Digit 4
5	TV Digit 5	VCR Digit 5	Cable Digit 5	DVD Digit 5	HD/STB Digit 5
6	TV Digit 6	VCR Digit 6	Cable Digit 6	DVD Digit 6	HD/STB Digit 6
7	TV Digit 7	VCR Digit 7	Cable Digit 7	DVD Digit 7	HD/STB Digit 7
8	TV Digit 8	VCR Digit 8	Cable Digit 8	DVD Digit 8	HD/STB Digit 8
9	TV Digit 9	VCR Digit 9	Cable Digit 9	DVD Digit 9	HD/STB Digit 9
0	TV Digit 0	VCR Digit 0	Cable Digit 0	DVD Digit 0	HD/STB Digit 0
-	N/A	N/A	Cable/Satellite Dash	DVD Zoom	HD/STB Dash
display	TV Display	VCR Memory	N/A	DVD Display	N/A
mute	TV Mute	TV Mute	TV Mute	TV Mute/Sound	TV Mute
volume (up)	TV Volume Up	TV Volume Up	TV Volume Up	TV Volume Up	TV Volume Up
volume (down)	TV Volume Down	TV Volume Down	TV Volume Down	TV Volume Down	TV Volume Down
channel (up)	TV Channel Up	VCR Channel Up	Cable Channel Up	DVD Skip>>	HD/STB Channel Up
channel (down)	TV Channel Down	VCR Channel Down	Cable Channel Down	DVD Skip <<	HD/STB Channel Down
flashbk	TV Flashback	TV Flashback	Cable Flashback	DVD Return	HD/STB Flashback
pip	TV PIP Screen On/Off	VCR+	Cable/Sat Day Up	DVD Marker	N/A
multi	TV POP-3 Multi On/Off	VCR Search	Cable/Sat Day Down	DVD Repeat a-b	N/A
pip ch	TV PIP Channel Tuning Switch	VCR Display	N/A	DVD Marker Search	STB Signal
c skip	Channel Skip	VCR am/pm	N/A	DVD Clear	N/A
sleep	TV Sleep Timer	VCR Timer	Cable/Sat Timer	DVD Repeat Chap	N/A
cc	TV Closed Captions	TV Closed Captions	Cable/Sat Page Up	DVD Sub Title	N/A

Remote Operating Mode Key Functions

KEY NAME	TV Mode	VCR Mode	Cable Mode	DVD Mode	HD/STB Mode
fav ch (Channel)	TV Favorite Channels	VCR Channel Map	Cable Page Down	N/A	N/A
quit	TV Menu Quit	VCR Quit	Cable Quit	DVD Resume	HD/STB Quit
up arrow	TV Select Up	VCR Select Up	Cable/Sat Up Arrow	DVD Up Arrow	HD/STB Up Arrow
down arrow	TV Select Down	VCR Select Down	Cable/Sat Down Arrw	DVD Down Arrow	HD/STB Down arrow
left arrow	TV Adjust Left Favorite Channels	VCR Tracking Down	Cable/Sat Left Arrow	DVD Left Arrow	HD/STB Left arrow
right arrow	TV Adjust Right Favorite Channels	VCR Tracking Up	Cable/Sat Right Arrw	DVD Right Arrow	HD/STB Right arrow
Push "Select" ⊙	TV Menu Item Select	VCR Enter	Cable/Sat Enter	DVD Enter	HD/STB Enter
menu	TV Menu	VCR Menu	Cable/Sat Menu	DVD Menu Disc Menu	HD/STB Menu
theater	TV Theater Modes	N/A	Cable/Sat Info	DVD Open Close	HD/STB Info
record	VCR Record	VCR Record	Cable/Sat Buy	DVD Angle	N/A
stop	VCR Stop	VCR Stop	VCR Stop	DVD Stop/Eject	VCR Stop
I<< skip	DVD Skip **I<<**	DVD Skip **I<<**	DVD Skip **I<<**	DVD Skip **I<<**	DVD Skip **I<<**
skip >>I	DVD Skip **>>I**	DVD Skip **>>I**	DVD Skip **>>I**	DVD Skip **>>I**	DVD Skip **>>I**
pause	VCR Pause	VCR Pause	Cable/Sat Guide	DVD Pause	HD/STB Guide
rew (rewind)	VCR Rewind	VCR Rewind	VCR Rewind	DVD Scan <<	VCR Rewind
play	VCR Play	VCR Play	VCR Play	DVD Play	VCR Play
ff	VCR Fast Forward	VCR Fast Forward	VCR Fast Forward	DVD Scan >>	VCR Fast Forward

Reference: MBR5045, 924-10114

Routine TV cabinet and screen cleaning

Careful and regular cleaning can extend the the useful service life of the TV. Be sure to turn the power off and pull out the plug before you begin any cleaning.

Screen Cleaning

1. Here's a great way to keep the dust off the screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
2. Make sure the excess water is off the screen, and then let it air-dry before turning the TV on.

Cabinet Cleaning

1. Use a soft cloth with a mild soap solution to wipe the cabinet. (Don't use any harsh, industrial strength variety of cleaner.)
2. Rinse the cloth and wipe the cabinet again.
3. Let the cabinet air-dry before turning the TV on.

Wood Cabinet

Use a quality wood cleaner and polish. This will protect the TV from dirt and dust, as well as keep the cabinet looking new.

Extended Absence

If you leave your TV dormant (Off) for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges. If you use an off-air antenna, you may also want to disconnect it from the back of your TV before leaving.

If you unplug the TV, you may have to reset the clock using the Clock Set menu described earlier. See page 27.

Troubleshooting

Some quick and easy tips to resolving problems

Symptoms	Possible Cause(s)	Possible Solution(s)	See page(s)
Power			
No Power.	• AC Power Cord not connected.	-Connect power cord. Try a different power outlet.	
	• Local power failure?	-Contact power company for information.	
No Source image.	• Source turned off.	-Turn Source equipment on.	
	• Source not selected.	-Use SOURCE to choose correct picture and sound source.	17
Clock Time			
Clock time is wrong.	• Wrong time set.	-Set clock to correct time.	27
Picture Reception			
Poor or no picture.	• TV station problems.	-Try a different channel.	17/21
	• Video menu not adjusted properly.	-Check Video menu option settings.	38
Local interference.	• Check for disturbing source.	*The following may cause image problems or distortion: Electrical appliances, powerful lights, cars, trucks; computers or portable phones; medical equipment; VCR to close to TV, etc.*	
	• Appliance too close to TV.	-If possible increase the distance between your Entertainment Machine and the offending appliance. Or shut one of them off.	
Poor or no color.	• Sub-standard broadcast.	-Try a different channel.	17/21
	• Sub-standard cable signal.	-Notify cable company of reception problem.	
Picture wobbles or drifts.	• CATV wire not connected or loose.	-Make or tighten connection.	6 - 12
	• Local interference.	-Try different channel. Turn off interfering appliance.	17/21
	• Scrambled CATV channel.	-Tune to unscrambled channel.	17/21
No CATV reception.	• Cable wire not connected.	-Connect cable to Antenna/Cable.	6 - 12
	• Cable service interrupted.	-Contact cable service.	
	• Antenna set, not Cable (CATV).	-Select Cable in Signal Source menu.	15
Images in picture distorted.	• Wrong aspect ratio.	-Use ASPECT to change to correct picture proportion.	17
Poor or no sound.	• Audio muted.	-Press MUTE or VOL (Volume) + key to increase sound level.	17
	• Broadcast problem.	-Tune to a different channel.	17/21
	• Internal Speakers turned off.	-Turn Internal Speakers on in Audio Menu.	39
TV turns On.	• Security Timer turned TV On.	-Cancel Security Timer, and/or turn TV off.	35
TV turns Off.	• Security Timer turned TV Off.	-Turn TV back on.	17/21
	• Sleep Timer turned TV Off.	-Turn TV back on.	17/21
No Closed Captions or Text.	• Not available on program.	-Check local TV listings to see if available on broadcast. -Relocate over-the-air antenna. -Try a different channel with Closed Captions or Text.	36
	• Not turned on.	-Pick a Closed Caption or Text option and turn Captions on.	36
Captions appear when sound is muted.	• EZ Mute selected.	-Set Captions option to off.	36

Some quick and easy tips to resolving problems

Symptoms	Cause(s)	Possible Solution(s)	Page(s)
Using Remote Control			
Remote does not work.	• Wrong mode selected.	-Press correct mode key to change mode (TV for TV operation.)	17
	• Not aimed at remote sensor.	-Point remote at Front Control Panel.	21
	• Remote too far from TV or too much light in room.	-Move remote closer to TV or darken room.	
	• IR path to TV interrupted.	-Remove obstructions.	
	• Weak batteries.	-Replace batteries.	15
	• Wrong battery polarity.	-Check that "+" and "-" match in battery compartment.	15
Mode did not switch.	• Mode switch takes 3 seconds.	-After pressing a mode key, wait 3 seconds before any key presses.	
Remote does not operate accessory product.	• Product Mode not programmed.	-Program for other equipment: VCR, DVD, STB etc.	43 - 47
	• Product not IR controlled.	-Remote only controls IR equipment.	
Menu Operation			
Menu options can't be changed or selected.	• Software lock-up.	-Unplug power cord for 5 minutes to unlock software. (Reset clock if necessary.)	
Security Timers do not work.	• "Off" selected on menu.	-Choose "On" to make timer(s) work.	35
	• Clock not set.	-Set clock.	27
Not able to add a 3-digit channel number.	• Did not pause for two dashes.	-Press the 1st digit of your channel number, wait until 2 dashes appear to the right of your number than add the other two digits.	
Picture Viewing Problems			
Image looks wrong.	• Wrong Video Menu Aspect Ratio.	-Use correct aspect ratio for source's image: 16x9 or 4x3.	29
Snowy or Poor Picture	• Wrong Ant. connection/location.	-Move antenna, check connection/location. -Check cable input.	
	• TV/VCR button set wrong.	-Set TV/VCR button on your VCR correctly.	
	• Wrong tuning mode.	-Are you in TV or cable tuning mode, and should be in the other?	
	• Wrong output channels selected.	-Make sure output channels tuned on all A/V equipment are on the same channel (3 or 4).	
	• Loose connection.	-Check that all connections are tight.	7 - 14
Picture has a big black box on it, but the sound is O.K.	• Caption/Text mode turned on.	-The CC (closed caption) option may be in Text 1, 2, mode. -Select Caption 1, or OFF in the Captions, Caption/Text menu.	36
Parental Control Problems			
Program content does not appear on-screen.	• Viewing has been restricted.	-Key-in password and turn Block (Restrictions) off.	33/34
		-Set restriction options in Parental Control menu to Off.	33/34
		-Set Lock On/Off options to Off in Parental Control menu.	33/34
	• Don't know password.	-Tune to channel without restrictions.	17/21
Front Panel doesn't work.	• Front Panel locked.	-Unlock Front Panel on Parental Control menu.	34
Can't view video sources.	• Video Inputs blocked.	-Unblock video inputs on Parental Control menu.	34
	• Quick Lock on.	-Unlock Quick Lock on Parental Control menu.	34
Can't lock Video Lock feature in parental control.	• Wrong source, not Video.	-Exit out of Parental Control menu. Press the source button on your remote and change the source to Video 1. Then you can reenter the parental control menu and lock the video lock. You must use this same process to unlock the video lock.	

Symptoms	Cause(s)	Possible Solution(s)	Page(s)
Sound/Audio Problems			
Normal picture but no sound.	• Check volume levels.	-Make sure the TV sound is not muted.	17
	• Try another channel.	-The problem may be the broadcast, not your TV.	17/21
	• A/V cables incorrectly connected.	-Install the Audio cables correctly.	6 - 14
	• Audio Out cables installed wrong.	-Install external amplifier cables correctly.	14
	• Internal Speakers turned off.	-Turn internal speakers on in the Audio menu.	39
	• No SAP signal.	-If the Audio Mode is set to SAP, the channel may not have an SAP program.	
HD/DVD Problems			
Picture looks wrong.	• Wrong picture format.	-Use correct aspect ratio for source's image: Normal, Wide, Zoom, etc. Press ASPECT repeatedly.	17/29
No picture or sound.	• Wrong source selected on TV.	-Select correct source equipment.	17
	• Source equipment turned off.	-Turn source equipment on.	
	• Tape or Disk not playing.	-Press "PLAY" on source equipment.	
	• Try another channel.	-The problem may be with the broadcast, not your TV.	17/21
	• Wires incorrectly connected.	-Install wires correctly on TV and equipment.	6 - 14
Menu Operation Problems			
TV does not change menu option.	• Select not pushed.	-Be sure to press "Select" thumbstick center bulls-eye when required as shown on menus.	17/19
	• Remote in wrong mode.	-Press TV to put remote into TV operating mode.	17
	• Software lock-up.	-Disconnect TV power cord from power outlet for 5 minutes.	
	• Parental Control on.	-Turn Parental Control blocks off.	
POP-3 / Split Screen Problems			
TV screen shows 3 channels on right side of screen.	• POP-3 feature is on.	-Press MULTI on remote to turn feature off.	17
TV screen shows 2 pictures.	• PIP Screen feature is on.	-Press PIP on remote to turn feature off.	17
Channel Tuning Problems			
Can't tune channels.	• ANT 1 source not selected.	-Press SOURCE on remote to show ANT 1 channels.	17
Can't tune to a particular channel using CH Up/Down.	• Channel was deleted.	-Reinstall channel to channel scan on Add/Del menu.	25

A list of definitions for some of the words found in this guide

75 OHM RF CABLE The wire that comes from an off-air antenna or cable service provider. The end looks like a hex-shaped nut with a wire sticking through the middle. It screws onto the threaded jack on the back of the TV.

300 TO 75 OHM ADAPTER A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.

A/V CABLES Audio/Video cables. Three cables bunched together—right audio (red), left audio (white), and video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

A/V DEVICE Any device that produces video or sound (VCR, DVD, cable box, or television).

ADDED Lets you add new channels to channel scan list that you'll scroll through using CH Up/Down.

AMPLIFIER An electronic device that amplifies sound from a television, CD player, VCR, DVD or other A/V equipment.

ANTENNA The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible for your home to be using an antenna.

ERASE Lets you remove channels from the channel scan list that you'll scroll through using Ch Up/Down.

INPUT Refers to the jack that receives a signal from a TV, VCR, or other A/V device.

JACK An input or output connection on the back of a TV, VCR, or other A/V device.

MONO SOUND Mono (monaural) sound is one channel of sound. With more than one speaker, all the speakers play the same audio.

OUTPUT Refers to the jack that sends a signal out of a VCR, DVD, or other A/V device.

SCAN Auto Program (channel search) automatically finds the channels available in your area.

2ND AUDIO PROGRAMMING/SAP Second Audio Programming (SAP) is another, separate, audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.

SIGNAL Picture and sound traveling through a cable, or over the air, to your television screen.

STEREO SOUND Stereo (Stereophonic) sound refers to audio that's divided into right and left sides or channels.

TUNER Device that picks up the signal and turns it into picture and sound.

Notes

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Notes

Zenith Electronics Corporation
Rear Projection TV Limited Warranty-USA

Zenith will repair or replace your product, at Zenith's option, if it proves to be defective in material or workmanship under normal use, during the warranty period listed below from the date of original consumer purchase. **This warranty is available only to the original, end user purchaser of the product and effective only when used in the United States, excluding U.S. Territories.**

WARRANTY PERIOD:		**HOW SERVICE IS HANDLED:**
Labor:	One Year from date of purchase.	**In-Home service:** Please retain your bill of sale for proof of warranty. **Please call 1-877-9Zenith (1-877-993-6484) to locate your nearest Zenith Authorized Service Center. Repair parts or a replacement TV may be new or remanufactured. Please see below for further information.**
Parts:	One Year from the date of purchase.	
Projection Tubes:	Two Years from date of purchase.	

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- To damages or operating problems that result from normal wear and tear, misuse, abuse, operation outside environmental specifications or contrary to the requirements and precautions in the Operating Guide, accident, lightening strikes or other natural causes, modification or alteration, incorrect electrical current or voltage, signal reception or input, computer software, or institutional or commercial use.

Therefore, you pay for the cost of repair or replacement under these circumstances.

CUSTOMER ASSISTANCE NUMBERS:

To prove warranty coverage:
Retain your dated sales receipt to prove date of purchase. Legible copy of your sales receipt must be submitted at the time warranty service is provided.

To obtain where-to-buy, nearest Authorized Service Center, product assistance or customer assistance:
Call 1-877-9Zenith (1-877-993-6484) (Mon. - Fri. 7:00 AM to 8:00 PM and Sat. 8:00 AM to 5:00 PM CT)
Please select the appropriate option from the menu.

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